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THE COTTON SITUATION.

[Special Dispatch to Manufacturers' Record.]
New York, October 9.

I am reliably informed that foreign cotton commitment for October exceeds 3,000,000 bales. Strenuous efforts will be made to depress all future markets. Advise planters to stand firm and dictate price.

S. F. B. MORSE.

The Manufacturers' Record has also learned from other sources that the speculators have just formed a very powerful combination to force prices down, and as every bale of this year's crop will be needed and can go into consumption at a fair, not an extravagant price to the farmer, with profit to the spinners if the spinners will work as hard to advance cotton goods as many of them have worked to depress the price of cotton, it is important that the cotton planter should get the real value of his crop.

A SUPREME NEED OF THE SOUTH

Another scare has been given the cotton manufacturers of New England by the invitation of Southern cotton-raisers and business men of this section to English cotton manufacturers to visit the South and study our methods of raising and manufacturing cotton, the idea of the invitation being to induce the English manufacturers to remove their plants to the Southern States. The New Bedford Mercury pooh-poohs the suggestion. But if not, why not?—News-Leader, Richmond.

The effort to induce the cotton manufacturers of Europe to visit the South is for the purpose of showing them the great cotton-growing capabilities of this section. It was believed that if they could see the possibilities in this direction they might be tempted to turn their attention to helping the South to increase its population, and thus increase its cotton crops, instead of trying to raise cotton in Africa. Every cotton manufacturer of the world, North, South and Europe, is alike interested in increasing the yield of cotton, for we

are square up against the stubborn fact that consumption has outrun production.

Without an increase in population in the South by immigration this situation cannot be rectified. If the manufacturers of Europe could be made to clearly see these facts by a personal study of the South they would then be the more ready to help turn some of the surplus population of Europe this way. The prosperity of the whole cotton world is staked upon a great increase in Southern population, and every influence which can be brought to bear upon the cotton manufacturers of New England and of Europe to make them see this fact is in the interest of the South.

That narrow view which looks only at the personal side to see whether the coming of such visitors would benefit this mill or that, this town or that, is beneath the thought of the broad men of the South who are trying to plan for every phase of Southern advancement. Whether cotton manufacturers of Europe or New England locate in the South or not is not half so important as whether they join in helping to turn the tide of population Southward. That, and nothing else, is at the back of the suggestion looking to a visit of European spinners to the South, and until we greatly increase our population it is worse than folly to expect any large increase in the average annual yield of cotton. The world is hungry, almost starving, for more cotton. The South has the soil and the climate, but it lacks the needed supply of labor. Every cotton manufacturer in the world is vitally interested in helping to increase the South's labor supply, and unless they join in every effort to accomplish this they are losing the supreme chance of helping their own business.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 56 and 57.

STEEL FURNITURE.

Steel furniture is to be installed in all the cruisers and battleships of the United States Navy. The use of such furniture is extending in financial institutions, courthouses, government departments, libraries and business offices—in fact, in every place where valuable publications or papers must be guarded as effectively as possible from fire. Record cases, tables, counters, desks, wardrobes, etc., are now made in steel, and the experience of the Baltimore fire, in which so-called fireproof buildings were damaged through the ignition from the

intense heat of their inflammable contents, demonstrated that non-combustible furniture is essential to rendering a building practically proof against damage or destruction by fire.

THE BRITISH IRONMASTERS' VISIT.

Those British Ironmasters who are coming over to attend the American meeting of the Iron and Steel Institute have had prepared for them a program and an itinerary which will put them over the ground at a rapid pace, much upon the plan of the usual "personally-conducted" tour. According to the program announced by the secretary of the Institute, their time will be fully occupied from the day of their landing in New York to the hour of their departure from that port on their homeward voyage.

Beginning with a formal session in New York on October 26, the visitors will have three days of sightseeing and business meetings in that city, then a day at Bethlehem and another in Philadelphia, thence to Washington for a reception at the White House and a day of sightseeing, after which will follow two days in Pittsburg, two in Cleveland, a Sunday in Buffalo, a day at Niagara Falls, and passing glimpses of Syracuse, Albany and Schenectady. Those who may prefer St. Louis to the Lake cities are offered an alternative route from Pittsburg, which will give them two days to see the exposition and two days in Chicago. Those who may be in more of a hurry than this program would indicate can skip Niagara Falls and catch a steamer for home on November 9, and it is planned to land the St. Louis section of the party in New York on sailing day, November 12.

A rush around the country at this gait, among sights that demand calm and deliberate inspection, is unsatisfactory to the tourist and unfair to the country. The brief time allotted to the St. Louis Exposition must be based upon the assumption that many of the visitors will come a week or two in advance of the meeting and will have been to St. Louis before the beginning of the tour.

It would be ungenerous to criticize an itinerary evidently arranged either by the visitors themselves or to meet their views, but it is not amiss to suggest the prolongation of the trip and the extension of the tour to some of the points of interest in the South, which can be reached with ease from St. Louis. It would be unfortunate for these visitors from abroad to return to their homes without having had even a glimpse of the South, where there is so much of interest to be seen, not only in those industrial lines with which they are most directly concerned, but also in other branches of industry with which they are less familiar.

Those British Ironmasters who have seen the iron industry in the South before would doubtless be glad of an opportunity to note the progress that has taken place in the nearly fifteen years

that have elapsed since they visited the South in an organized party. Those who have never studied this Southern industry at first hand should not fail of this opportunity to enlarge their knowledge of the manufacture of iron and steel and the conduct of allied industries in the United States, a knowledge that is incomplete without a good insight into the important place which the South occupies in relation to the country as a whole.

In every iron-making or coal or ore-producing section there are characteristic local conditions which mark the industry as differing from other regions. In the assembling of raw materials in particular the Southern iron industry is unique, and several other less important features characterize the industry as occupying a position of its own. An understanding of all these conditions gained by personal observation is essential to a full knowledge of the iron and steel industry of the United States.

Without desiring to interfere in any manner with the comprehensive itinerary that has been arranged for the British visitors, we are moved to express the earnest hope that a considerable number of them will prolong their stay in St. Louis sufficiently to enable them to get something more than a hasty glimpse of the exposition, and thence to turn their steps Southward for at least a passing view of a section of the country that is always of absorbing interest to the traveler.

All who so come will be assured a hearty welcome and generous hospitality wherever they may go. The commercial organizations in Birmingham and other iron centers ought to move promptly in this matter.

GAINS ON SOUTHERN ROADS.

The monthly statements of railroads in the South evidence the continued prosperity in this part of the country. For August the Atlantic Coast Line shows an increase of 6.94 per cent. in gross and 2.36 per cent. in net earnings, as compared with the same month of the last fiscal year. The Southern Railway displays an increase of 7.68 per cent. in gross and 4.65 in net earnings; the Central of Georgia, 5.87 in gross and 97.32 in net earnings; the Chesapeake & Ohio exhibits the gratifying gain of 10.60 per cent. in gross and 23.90 per cent. in net; the Norfolk & Western shows 1.77 per cent. increase in gross and 4.50 per cent. in net; Louisville & Nashville has 4.63 increase in gross and 16.40 per cent. in net; Nashville, Chattanooga & St. Louis, 7.20 per cent. in gross and 18.82 per cent. in net earnings; Cincinnati, New Orleans & Texas Pacific, 15.38 in gross earnings and 18.94 in net; Illinois Central, which, by the way, is only partly a Southern road, shows 6.12 increase in gross and 60.95 in net earnings; Yazoo & Mississippi Valley has 5.57 increase in gross and 159.71 in net earnings; Mobile & Ohio, 12.65 increase in gross and 55.28 in net earnings; Kansas City Southern, 1.81

increase in gross and 38.08 in net; St. Louis Southwestern, 21.35 gain in gross and 34.29 in net.

These are the figures displayed by some of the Southern roads, all of which, with hardly any exceptions, show gains in both gross and net earnings. The heavy increases in net earnings by certain of the lines is due, at least in part, to the fact that the cost of improvements last year was charged to operating expenses.

JUST A SLANDER.

Mr. Williams is out of the Seaboard Air Line Railway for good and all. He has acknowledged it himself. He seems to be the last person in the country to get such definite information as to admit its inevitable truth.

There ought to be a lesson in the study of the case of John Skelton Williams and his reluctant and final admission that he is out of the road. He has been getting out for two years, and either did not know or would not admit what everybody else knew. He has denied his disappearing hold on the stock of the Seaboard Air Line Railway till each successive denial was as red and apoplectic as if it were preparing to burst and collapse the next minute. But now he denies no more. At last his sinucure and perfunctory place has been abolished because there seems to be no more need for a powerless poser.

Suppose the numerous and cumulative denials of Mr. Williams were assembled and published in chronological order and in a parallel column with what has happened. Would not that jar the public?

What was the use? Why should not a man in a public position, where the facts are sure to be known, tell the truth, or at least refrain from trying to impose on the credulity of the public in a manner which is as shameless as it is useless?

The citizens here feel some resentment against Mr. Williams for the part he tried to play in taking the offices of the road from Portsmouth when he had no actual property in the road. He had nothing but a cinch. That was not bankable, and he lost that.—Portsmouth Star.

Is it possible to conceive of malice greater than this? Of all the men of this generation who have led in Southern development, whose untiring energy have been given to Southern upbuilding, who in spotless character have made their mark upon Southern life, none stands higher than John Skelton Williams. Beaten temporarily by a financial combination of far-reaching power, the ownership of the Seaboard wrested from the South and carried to Wall street, a Virginia paper gloats over the fact and rejoices that Wall street, and not Virginia, controls the Seaboard, and with malicious bitterness maligns one of the foremost men that Virginia or the South has produced since the war. Robert E. Lee was defeated on the battlefield, and therefore, according to the Star's method of judgment, should only be worthy of condemnation.

The Manufacturers' Record thinks our C. & O. president, George W. Stevens, guilty of "gross ignorance" in not seeing or recognizing the virtues of that journal. "Uncle" George W. may be a dampfool or an ignoramus, though we had not so regarded him. We would be willing, however, to buy the entire editorial force of the Record—lock, stock and barrel—at its real worth and trade it even for "Uncle" George at his real worth, and stand pat. Our fortune would then be in *vinc.*—The Review, Clifton Forge, Va.

Sure—that would be too easy—it would be like finding money without a claimant. But the Review is a little wrong. The Manufacturers' Record never intimated that President Stevens was an ignoramus. On the contrary, the Manufacturers' Record has very great respect for Mr. Stevens' ability as a railroad operator, and is always glad to bear testimony to that fact, but Mr. Stevens' letter simply showed how a great railroad man might utterly, if innocently, blunder in dealing with

newspapers. Mr. Stevens' letter was just as much an insult to the honesty of the Manufacturers' Record, even if he did not so intend it, as would have been an offer to Mr. Stevens to pay him a bribe to secure from his railroad better facilities than a competitor could get without a bribe. No man who knows President Stevens would ever risk making such a proposition to him, and if Mr. Stevens had understood newspapers he would never have written that letter.

NEGRO SUPPORT OF NEGRO COMMON SCHOOLS.

Upholding, as a matter of course, the hands of his co-worker in Ogdenism, "Booker T. Washington" has written for the Atlantic Monthly a review of divers sociological disquisitions by Mr. Edgar Gardner Murphy. One paragraph of the review is worth passing notice. It is as follows:

On the subject of the cost of educating the negro Mr. Murphy calls attention to a phase of this subject seldom referred to by Northern or Southern writers, and that is, the large indirect tax that the colored people pay toward their own education. I quote again a portion of his own strong words on this point: "Out of its poverty the South has given much. The negro, too, has given directly or indirectly. As has already been suggested, the rents pay the taxes, and the negro helps pay the rents." Attention should be called to the further fact that in not a few counties and towns of the South the liquor dispensary exists, and the profits from these dispensaries, which are often large, go into the school fund. The greater part of this money comes from the lower class of colored people. Again, in Alabama, for example, last year the profit to the State from the work of the convicts was not far from \$250,000. At least four-fifths of the people who earned this money for the State were colored.

The novel theory of the indirect taxes paid by negroes toward the support of negro common schools, tending to obscure and belittle the vast amount wasted by the whites of the South in that direction during the past 30 years, was put forth originally, we believe, as a product of the negro intellect. It was in circulation for two or three years before it became appropriately entombed in Mr. Murphy's masterpiece, and has had fit and joyful resurrection into current literature through a second negro intellect, incapable of comprehending the *reductio ad absurdum*, and yet perfectly logical position, into which he has been led by his willingness to father the conception of the valuable contributions made to negro education by negro rum-drinkers and of the economic value to the State of negro convicts. Such logic carried through relentlessly suggests that the solution of the Southern "educational problem" is in making all negroes drunkards and convicts.

Seriously, though, the plan of education of the negro, followed for 30 years by the South under outside suggestion, the plan which Ogdenism would intensify, has tended to reduce the value of the negro to the State. The point to be considered by well-balanced, well-informed and disinterested students of the South is the difference between support of the State by miseducated and misdirected negroes and support of the State by intelligent whites. Pondering upon that point must compel efforts to add, though, immigration to the number of intelligent whites in the South and to bring back the deluded negro into right lines. Essential to that end is the suppression of Ogdenism in all its forms.

The Penn Metal Ceiling & Roofing Co., Ltd., Philadelphia, Pa., writes to the Manufacturers' Record as follows:

For some time past it has been our pleasure

to receive the Daily Bulletin, published by the Manufacturers' Record Publishing Co., and without a doubt it furnishes the most accurate and reliable information of any papers we receive pertaining to the South, and we believe there is no journal published covering this particular field more thoroughly. It gives us great pleasure to testify to this fact, as we have never found any misleading statements mentioned therein, and the results obtained have been to our satisfaction.

Swinging Partners in Sociology.

It is announced that the National Child Labor Committee, a sort of sociological omnium gathrum of New York, has selected as its assistant secretary to the South the Reverend A. J. McKelway of Charlotte, N. C. As editor of the Presbyterian Standard, and subsequently backing up his argument as editor of the Charlotte News, the Reverend A. J. McKelway assumed responsibility for the promulgation of a weird theory rather indefinitely expressed, which the New York Tribune, in furtherance of the "democratization" of the South, under the auspices of Ogdenism, has twisted into the idea, "the same greed which aroused Massachusetts owners of Southern mills to fight child-labor laws now impels them to keep the poor whites of the South in ignorance." It may be taken for granted that the alleged opposition of some millowners to the education of their employes will continue to be the text of the Reverend A. J. McKelway's assistant secretaryship, with headquarters at Charlotte. It is one of the links between Ogdenism and the twin agitation in the service of which the Reverend A. J. McKelway has enlisted. Another link is the succession to the Reverend A. J. McKelway in the editorship of the Charlotte News of Professor J. D. Eggleston, Jr., late superintendent of city schools at Asheville, N. C.; late editor of a publishing business in Richmond, Va.; late editor of the defunct publications of the Bureau of Publicity at Knoxville, Tenn., of the Southern Education Board, and now superintendent of schools in one of the counties of Virginia. Persons who remember some of the marvels of the Knoxville publications have, in the swinging of partners in Ogdenism and "child-labor" agitation in the sanctum of the Charlotte News, assurance that its hilarious career in sociology is to be maintained, to the delight of the nations.

Growth on Healthy Lines.

In a letter to the Manufacturers' Record touching the cottonseed-oil industry of the South Mr. Edward Atkinson of Boston writes:

"What I have observed during a long life is this: that the successful branches of industry begin small, growing by expansion with the gradual development of skill and aptitude on the part of individuals by whom they are undertaken, and that all, or nearly all, attempts to begin on a great scale by corporations without the previous individual development almost inevitably fail, pass through a period of bankruptcy and reconstruction and ultimately succeed if justified by the natural conditions. For instance, witness the collapse of the boom cities everywhere, notably the collapse and long delay in the development of Middlesborough, in Kentucky, an undertaking fully justified by all the natural conditions if the promoters had begun and developed it in the right way; but trying to build a city fully grown without development, the progress of that section was retarded by many years. Hence my urgency as a practical economist of the importance of the development of the small individual enterprises without running the risk of very heavy losses in the attempt to start big things prematurely. The curse of this country is its brag and bumptious-

ness due to bigness, summarized in the slang phrase of 'big head.'"

Warehousing Cotton.

The Manufacturers' Record has referred several times to the plans of the Baltimore Fidelity Warehouse Co. for establishing cotton and general storage warehouses and issuing negotiable receipts to be guaranteed by the Fidelity & Deposit Co. of Maryland. The company is now preparing to build the first of its series of modern structures for this warehousing business. It has purchased a site on the east side of Baltimore harbor, comprising about 340,000 square feet of space, including a water frontage of about 1100 feet. There will be built first two structures of modern design and equipment in every particular for facilitating the handling and care of cotton, etc., with a capacity for about 50,000 bales. These buildings will be 100x500 feet and 60x200 feet, respectively, and active preparations to begin their construction are now being made. It has been decided to use concrete building blocks, and three machines for manufacturing them are now in operation at the site with a daily capacity of 600 blocks. All the detail plans and specifications will probably be ready during the coming week, and further particulars will then be announced. The company will do the erecting work, in charge of its own officers, while Messrs. Flaherty & Lande of 26 Broadway, New York city, are the consulting engineers. Its offices are in the Fidelity Building, at Charles and Lexington streets, Baltimore, Md. Thus one more substantial move is being made in cotton warehousing. Throughout the South there are opportunities for many such enterprises.

For Italian Immigration.

Uvaldo Pesaturo, No. 274 Atwells avenue, Providence, R. I., who is a notary public and Italian interpreter, writes to the Manufacturers' Record as follows:

"Having had occasion to read your interesting Manufacturers' Record, I notice from its well-written articles that there is a constant demand for Italians to work on farms and on the railways of the Southern States. In view of this I write to learn the names of those who need Italians in the South, so that I can tender them my services in inducing Italians to go South. I should like to act as agent. Providence is a great city of Italians. There are more than 30,000 here. Their two landing places, New York and Boston, are not far away, and I am therefore in a position to render some service to the railways and agriculturists of the Southern States."

To Build Automobiles.

In view of the very rapid development of the automobile business, which is now attracting the attention of the entire country, the Manufacturers' Record is glad to note that the South is making a start in that direction. We are in receipt of a letter from the Memphis Motor Vehicle Co. stating that it has organized a \$100,000 company to build motor carriages, delivery wagons and trucks, and that it is in the market for gasoline engines and machine-shop equipment with a view to building automobiles. It is doubtful if any other line of industrial development in this country of such magnitude was ever created in so limited a time as that of the automobile business.

The Monongahela Consolidated Coal & Coke Co., to meet the growing business at New Orleans, will install a floating plant costing about \$40,000, by which 100 tons of coal may be loaded on a vessel an hour and a good-sized contract may be carried out with 10 or 12 men, instead of 100, as at present.

EDUCATION OF SOUTHERN TEXTILE OPERATIVES.

The Practical Work of Cotton-Mill Managements for the Welfare of Employees.

Expansion of cotton manufacturing in the South is, perhaps, the most striking phase of the industrial renaissance and growth of that section in the past 25 years. One of the most interesting features of the textile industry is the practical interest manifested by mill managements in the education and the material comfort and welfare of their employees. This in its varied forms is without parallel in the history of the industry elsewhere, and probably without parallel in the history of any other industry anywhere. In many respects the situation in the South is unique. While many cotton mills are but additions to the wealth-creating activities of cities and towns, many others are beyond corporate limits, or constitute individual communities of their own. Hence, it is found that in some cases the operatives are merely indistinguishable units in a population with many lines of occupation, and in others form with their employers self-dependent groups. The result is a social condition varying according to different localities and inducing divergent educational manifestations. Types of these are presented in the following pages through succinct and authoritative statements from the men most interested in furthering education in their respective cities, towns and villages.

A statement made to the South Carolina legislature two years ago, based upon returns from 65 of 117 mills in the State, showed that in addition to paying more than \$50,000 in taxes, the mills were giving annually more than \$27,000 for schools in buildings furnished by the companies at a cost of about \$85,000, and that they had expended more than \$90,000 toward the building of churches in the mill villages. Minute study of the contributions with which that statement dealt would have revealed for South Carolina the manifold shapes which such contributions take in all the distinctive cotton-manufacturing States of the South. Characteristic facts are these:

A North Carolina mill built and equipped about 15 years ago a schoolhouse for the operatives, and has since that time furnished the school for 10 months in the year entirely free with the exception that books and stationery are sold to encourage the pupils to take care of them. Till last year the mill, in addition to paying taxes for the common school fund, met all of the expenses of this school. It then arranged with the school board, of which the superintendent of the mill and one of the operatives are members, to make a school district of the village, and it is ready to supplement the school fund so that the school term of 10 months may be maintained. Another company in the same State erected a school building at a cost of \$6000 or \$7000 to accommodate 400 pupils, and supplements the common school fund with a donation sufficient to guarantee an eight months' term. In a group of three mills in Georgia the common management expended \$10,000 in building and equipping schools, and provides heating and lighting and janitor service, in addition to supplementing the public school fund. Stockholders of a mill company in South Carolina are building and equipping a clubhouse with bowling alleys, gymnasium, shower baths, reception-rooms, classrooms, etc., for the operatives at a cost of \$10,000. In an Alabama town, in the absence of adequate facilities, the mill built a schoolhouse for its own children and ran it independently for three years. In 1901 the mill village and the town were made a special school district, and the company contributes enough to insure an eight months' term. It, moreover, has established a free library and amusement hall for its employees. One Mississippi mill has asked permission to enter the children of its employees in schools of a nearby town, and has offered to pay the town for the privilege. A few other facts may be thus condensed: School building on mill property built by the mill partly supported by State funds for seven years; schoolhouse furnished by the mill, which adds to State and county funds from \$1000 to \$1500 a year for its support; between \$1000 and \$1500 contributed each year, so that the free school may be open nine months; the school supported by a mill, the only graded school in the county, and the only public school having a longer term than four months; school run by the mill independently of county or town; graded school of the town furnished a building free of charge by the mill; free tuition given all employees' children between the ages of six and twelve years; \$1000 added by a mill to the district school appropriation to build and equip an up-to-date house; help urged to avail themselves of the opportunity for schooling, and extra help employed to permit operatives disposed to study to attend school. One mill president writes that he does not know of a single mill in his section not contributing to schools from its private funds, and another is convinced by personal observation that one will find that nine mills out of ten in the Southern States maintain schools for the benefit of children of the operatives.

Obstacles there are, of course. One mill, which built and equipped its own school, which is maintained for nine months in the year, finds that its efforts to get children into the school are not sustained by parents, and in consequence there is never an attendance of more than half of the children in the mill village eligible for school, while those who are not at work play about the streets. Parents, according to another report, in a great many cases think that their children should help them earn a living instead of going to school. This is a reflection of conditions to which parents were subjected before the mills brought the opportunity for the children to go to school, and it is natural, perhaps, on the part of persons who have long been inured to poverty. They cannot readily adjust themselves to new circumstances. They are ugly forms of the evils inseparable from any economic evolution—evils not to be cured by revolution. The aggravated form of this appears in the statement, "we are exceedingly anxious that all our children get the benefit of the four graded schools, but in some instances, on account of worthless vampire fathers, that will never be the case until we have a compulsory education law." This view banks upon the unwitting tendency of not a few mill men in the South to substitute one ill for another. Compulsion undoubtedly should be exerted, but it should be felt primarily by vampire parents, and should take the form of rigidly executed vagrancy law. In the meantime, the mill men of the South, already thoroughly organized in several States in

resistance to demoralizing and dangerous agitations, should have no difficulty in getting together on this point and effecting by agreement what the law does not accomplish, remembering that men and women may not be made moral by law, and that the less the law is concerned in purely social affairs the better for all parties concerned.

As has been noted, it is not alone in provision for schools that the spirit of the millowners is displayed. In some places, where the comparative scantiness of population would not justify a church building for every denomination represented among the operatives, a union church is provided by the mills, where services for the different denominations are enjoyed in regular course. In other places the mills are foremost in encouraging the building of churches by giving sites and by contributing toward erection of the building and in aiding generously in the support of the ministries, while the families of the managements are represented among the Sunday-school teachers and in other religious and philanthropic work. Families of operatives are given medical facilities by mills. Kindergartens and playgrounds are maintained for infants, while older children and men and women have their free libraries, halls for lectures and other entertainment, and in one North Carolina town the mill sees that a baseball team is well supported. Several thousand dollars have been spent by a Georgia mill in building, furnishing and equipping for the use of its operatives the most complete club of its kind in the country. The building, situated on one of the principal streets of the city, contains a large auditorium, a library, a parlor, a smoking-room, classrooms for a night school, billiard and pool rooms and up-to-date gymnasium and baths. In all of this is shown the sincere interest of employers in the betterment of employees. Some expressions of this interest are as follows:

"We consider the school as absolutely necessary to further the interests of the mill, as well as those of the employees."

"The average Southern mill is doing more for its employees than the Eastern mills, as they find down here that money spent in channels of this kind is repaid fourfold."

"We contribute liberally to anything that is uplifting and conducive to happiness or comfort of our employees."

"We are always ready to encourage anything intended for the benefit of our employees, and to adopt any new measures which will afford them additional comfort and happiness."

"We believe in educating our people, both mentally and morally, and have always responded promptly to any move or suggestion looking to the betterment of the condition of our operatives."

"We do not believe there is a mill anywhere in the South that would be so shortsighted as not to wish its employees to avail themselves of all the education it would be possible for them to obtain. Ignorance is not a good recommendation for useful help."

"In addition to the free public schools of the county, we maintain a school of our own for the education of the children of our operatives. And we do this in our own interest, as well as in the interest of the children, believing that educated help is far more desirable than uneducated."

"I am a firm believer in good schools and a good attendance by the children."

"We encourage the parents of our children to keep them in school as much as possible."

"We compel all children who cannot read or write to attend school at least four months every year."

"This corporation has at heart the good of its small army of workmen, and seeks on all occasions to retain their good-will by acts of justice and equity. The betterment of our people in their home and social life has been sought through the several lyceum courses, illustrated lectures, night schools, circulating libraries, all free, and many other agencies."

Here is demonstrated that however "good business" the work of the mills for their employees may be, there is a higher sentiment inspiring it. The generally excellent understanding between employers and employees is an outcome, but there is an influence farther back. It is noted, for instance, that South Carolina operatives work not far from the place where they were born, and that there is a natural sympathy between them and the managements. But this feeling is not confined to South Carolina, and homogeneity of management and operation is not always the closest tie. For example, one writes: "I am part owner and manager of six mills, in which work men and women who are sons, brothers-in-law, cousins, etc., of mine, and many of them are related to prominent families of our State. Similar conditions exist nowhere else."

Nor are efforts for the betterment of employees confined to employers native of the South or to any class of mills. Graniteville, S. C., had its model factory and model homes more than 50 years ago. The company maintains its reputation both at Graniteville and Vauluse, and is contributing about \$2000 annually for the support of the schools there. Another mill in the same State, just started this year, immediately built a schoolhouse and ran a summer school for three months, partly at its own expense, and will supplement the public school fund. The Massachusetts Mills at Lindale, Ga., the largest representative of New England capital in Southern cotton-milling, has spent \$14,000 for a school building, and contributes about \$2000 annually for the support of this school. In addition, in this mill town of 4000 population, with an average school attendance of 420, the mill supports a kindergarten, a library and lyceum course, while maintaining almost the whole cost of three churches.

This phase of Southern industrial life, this genuine philanthropy, with no personal, individual axe to grind, is not usually proclaimed from the housetops. Known to intelligent Southerners, and thoroughly appreciated by them for its soundness and effectiveness, it does not seek notoriety, and is even inclined to be silent about itself in the face of wilful or ignorant misrepresentation. Some Lucy Larcom could find in it material for an unending series of studies outrivalling in interest the rather limited but thoroughly exploited material created in Lowell half a century ago. The general situation has long been known by the Manufacturers' Record and by others who approach discussions of conditions in the South from the starting-point of reason and judgment, but detailed facts as set forth below have been furnished by the mills themselves only upon solicitation of the Manufacturers' Record.

Perusal of those letters emphasizes the statement of one mill, that "if a great

many of the agitators would get themselves informed before making some of their ugly charges they would not find themselves in the ridiculous position of having talked a great deal about things of which they knew nothing":

Lindale, Ga.

H. P. Meikleham, agent Massachusetts Mills in Georgia, Lindale, Ga.: I am very much interested and pleased in the interest you are taking in denying the slanders that are being spread about Southern cotton mills. I am sending you under another cover pictures of the high school at Lindale and the different classes; also a copy of the Lindale paper with an advertisement in it giving facts in regard to Lindale. We have done everything possible for the education and uplifting of our help, physically, morally and mentally, and have spent a great deal of money on the same. We contribute annually in teachers' salaries and incidental expenses for our school here about \$2000. This is outside of our taxes. We have one of the best-equipped school buildings in the South, that cost us \$14,000. We have a principal and eight teachers, and conduct our school for nine months in the year, besides a free night school for five months in the winter. We had an enrollment of over 500 scholars last year, with an average attendance of 420. This in a mill town of 4000 people. We have, besides, our "kindergarten" for the smaller children, and in addition we have a well-equipped library under the supervision of a competent librarian, and also a lyceum course, embracing the best lecturers and entertainers in the country. We have three well-equipped churches here, Baptist, Methodist and Presbyterian, the cost of maintaining and equipping the same falling almost entirely on us. We also compel all children who cannot read or write to attend school at least four months every year. Any other information that I can give you that will be of any help to you I will be very glad to give.

[The advertisement of Lindale to which Mr. Meikleham refers gives as the advantages of the place for families wishing employment in a cotton mill the following:

The cotton mill under the management of Southern men; healthiest town in the State; pure spring water furnished free at every door; houses first-class in every respect at moderate rent; streets well lighted with electric lamps.

Largest free school in Floyd county outside of Rome. Last year there were nine teachers and 420 pupils.

No children under 12 years allowed to work in mill.

Three good churches, free library, free pasturage for cows and horses, free garden plots.

Masons, Knights of Pythias, Odd Fellows and Red Men each have lodges here. Lindale publishes a live weekly newspaper, the Georgia Free Lance. Besides these, Lindale supports a military company, brass band and baseball team, all made up of people working in the cotton mill.]

Greenville, S. C.

Thomas F. Parker, president Monaghan Mills, Greenville, S. C.: At this mill all operatives on being employed are required to agree that their children over 12 years of age shall work in the mill, and those from 5 to 12 shall attend the kindergarten or day school. This agreement is signed by the parents. Some 600 operatives are employed in the mill, and we have a mill community of about 1800, including infants and the aged. The enrollment of our day school is about 150 and of our kindergarten about 60. The term is 10 months each year. There are four teachers for the school, and in the kindergarten a teacher and her assistant. The school building, a very commodious one, is built and furnished entirely at the expense of the company. The county defrays a portion of the expenses of the

school. "The remainder of the expenses and those of the kindergarten are paid by the mill corporation. The company has erected a hall, which it furnishes free of charge for the use of the various secret benevolent orders which have been organized among its operatives, and in the same building has maintained at its expense two rooms, the first as a library, with 1000 well-selected volumes and periodicals; the second as a game room, with such games as the boys and girls most care for. The librarian and caretaker of these rooms is paid for by the company. In January, 1904, there was also established in the mill village a Young Women's Christian Association, at which there is employed a general secretary and a teacher of domestic arts and sciences. This association has now many members, and includes in its classes cooking, sewing, basketry and a number of other educational and social classes. The young women in charge are thoroughly practical, and the association is steadily growing in favor with our people. The buildings and equipment of this association are furnished entirely by the company, though the operatives contribute in dues towards the maintenance of the association. There are over 100 members in the different classes. The reception and growth of the Y. W. C. A. was such that we decided to encourage the opening of a Young Men's Christian Association, and last June such an association was organized and a general secretary is now resident in our village. Certain stockholders interested in the promotion of such work among the operatives are building and equipping a suitable building, with bowling alleys, gymnasium, shower baths and reception rooms, classrooms, etc. The building and equipment will cost in the neighborhood of \$10,000. This building is now nearing completion. Already some classes have been formed, among others a vocal class of some 60 and a band of 24 pieces. The maintenance of the association, while borne largely by the men, will be assisted in also by the company. From the present indications it is thought that within a year the association will have over 200 members. The company has also at its expense built and maintained a Union Church and contributed towards the support of two resident ministers in the village. With a view to improving the condition and class of its operatives, and adding to their enjoyment, this company has also paid considerable attention to the grounds around the mill and cottages. Owing to the efforts of the company in these directions much has been done by the villagers themselves to improve their home grounds, each family for the most part having its own house, there being in all over 200 houses in the mill village. South Carolina mill operatives are mostly born not far from where they work, and their presidents are home people. There is, therefore, a natural sympathy in the different departments of a mill and its village not usually found elsewhere. Alert mill men in this section are fostering this feeling as one of their valuable assets to be carefully guarded in this era of walking delegates and business misunderstanding and conflict elsewhere. Apart from higher considerations, business foresightedness causes mill men to entrench themselves in their present position by forestalling with progressive and aggressive measures the discord-sowing attacks of the labor agitator. In addition to the amounts directly paid by this corporation for the religious and welfare work in its village, it also pays in State and county taxes devoted to school purposes approximately \$2000 annually.

J. D. Woodside, secretary and treasurer Woodside Cotton Mills, Greenville, S. C.: When we built our mill last year we erected an adequate school building, and by our supplementing the public-school fund we have a good school running from 8 to 10 months during the year without cost to the patrons of the school.

Rockingham, N. C.

J. P. Leak, president and treasurer Leak, Wall & McRae (Inc.), Rock-manufacturers of saten tickings, Rockingham, N. C.: About 15 years ago we built and equipped, at our expense, a very comfortable schoolhouse for the use of our operatives. Since that time we have furnished them a school for 10 months in each year entirely free, except that we require them to buy books and stationery to encourage them to take care of same. We sell them the books and stationery at cost. We employ the best teachers we can get, and do everything in our power to encourage a full attendance. Until last year our company paid every dollar of the expenses connected with this school, in addition to paying taxes for the common-school fund. We then arranged with the county school board to make a school district of our village so as to get advantage of the public-school money, which will run the school for a part of the term. When this amount is exhausted we will pay to the county treasurer, in addition to our taxes, a sufficient amount to continue the school for 10 months per annum. Our school is now under the management of the county school board. Our superintendent and one other of our operatives are members of the board. The other mills here have done as well for their operatives.

R. L. Steele, president Steele's Mills, Rockingham, N. C.: Our cotton mills have, almost from their very beginning, either maintained entirely at their own expense, or have supplemented the school fund sufficiently to have a nine months (full term) instead of only a few months school. One of the mills in which I have a little interest did for quite a long time maintain the school at its own cost, not touching the public-school money, but letting that go to the support of schools in the other school districts in the county, and has kept this up for years until the present, having only recently adopted the usual custom of supplementing the school fund. We employ competent teachers at these schools, and see that every facility is given in order that the children may have all advantages that are to be had at similar schools. We have not only contributed in respect to education, but have either built them churches or have contributed largely to building same. We believe in educating our people, both mentally and morally, and have always responded promptly to any move or suggestion looking to a betterment of the condition of our operatives. We have about completed a nice, well-constructed schoolhouse for our mill help, furnishing everything free except books and stationery to the scholars.

Columbus, Ga.

C. L. Peirce, secretary Eagle & Phenix Mills, Columbus, Ga.: We are glad that you have taken up this matter, and are sure that you will treat it thoroughly, to the confusion and routing of our enemies. We beg to give you the following facts relative to betterment and educational work among our employees during the past few years. This matter is ever on our minds, and has our lively and constant attention. The Eagle & Phenix Mills, Columbus, Ga., has built, furnished and equipped, at a cost of several thousand dollars, the most complete and elaborate club of its kind in the South—The Eagle & Phenix Club. Its privileges are offered the employees of this corporation at a nominal

cost. This building is situated on one of the city's most public and desirable streets, and contains an up-to-date gymnasium, with every needed apparatus; a large auditorium furnished with comfortable chairs, stage and piano, a fine library of about 1500 volumes of standard reference and late books, an elegant parlor, smoking-room, classrooms for night school, marble and porcelain baths, both tub and shower; tennis alleys, pool and billiards. This club has been in successful operation for several years; is legally chartered, and elects its own officers. The amount of good it has done among the mill hands cannot be measured. In addition to the Eagle & Phenix Club, this corporation has for some time supported a kindergarten in Phenix City, one of our mill suburbs, and has just completed and opened an elegant kindergarten in Girard, another suburban town. In these two kindergartens the latest methods are employed by the best graduate teachers. The tuition is absolutely free to the children of our employees, and further, occasional picnics, mothers' days and trolley rides are given the pupils and their mothers to keep alive an active interest. These kindergartens are always full to their capacity, and it is hoped will give these little chaps a start, the impetus of which will carry them in later years to a higher mental and moral level than their less privileged progenitors were enabled to reach. This corporation has at heart the good of its small army of workmen, and seeks on all occasions to retain their good-will by acts of proper justice and equity. The betterment of our people in their home and social life has been sought through the several lyceum courses, illustrated lectures, night schools, circulating library—all free—and many other agencies.

Cordova, Ala.

Scott Maxwell, agent Indian Head Mills of Alabama, Cordova, Ala.: It has been the policy of our company since its organization to do everything it could in the interest of schools for the children of our mill village. We have been in operation for a little over six years. The first three years of our existence the city schools here were very poor, and our company fitted up a nice comfortable schoolroom with patent desks and employed a competent teacher for nine months of each year. Everything for the school was furnished and was absolutely free to all the children of the operatives who could avail themselves of it. In 1901 the town of Cordova and our mill village were made a special school district, and the town built a large four-room school building, which was furnished throughout with patent desks by our company, and each year we have contributed from \$100 to \$200 to supplement the school fund in order to give the pupils the benefit of an eight months' term. We have absolutely no restrictions, and every child of school age is at liberty to attend the full term if their circumstances and parents will permit. Our company, in the interest of better education and for pleasure of its employees, has fitted up a nice little free library of several thousand volumes; also have a large hall with seating capacity of over 200, well lighted by electricity, which is free to employees for any entertainment they wish to have. In summer we have a large well-fitted-up playground for children, with dancing platform and a large swimming pool, which was put in at considerable expense. We contribute liberally to anything that is uplifting and conducive of happiness or comfort of our employees.

Spartanburg, S. C.

Arcadia Mills, Spartanburg, S. C.: Our mill is new; just started this year. We have built a schoolhouse large enough for our present needs; run a summer school for three months, partly at our own ex-

pense; will start up again later, and will then supplement the public funds from our own treasury. The education of the children is not neglected in this section by cotton mills.

John A. Law, president and treasurer Saxon Mills, Spartanburg, S. C.: The average school term in South Carolina is, we understand, something less than four months. The free public school in the Saxon Mills village has been kept open eight months several years past, the Saxon Mills Company supplementing the county funds to such extent as was necessary to so lengthen the term. I am enclosing for your information a clipping from the Charleston News and Courier of January 16, 1902, which gives a tabulated statement as to what had been done along this line by the South Carolina cotton mills. These figures would doubtless be largely increased if compiled at the present time, but, slightly stale though they may be, they carry their own argument.

[The tabulation to which President Law refers is based upon returns from 65 out of 117 mills in the State at the time of its compilation, about two years ago. It was presented to the legislature, together with a valuable communication signed by Messrs. James L. Orr, E. A. Smyth, J. H. Montgomery, J. B. Cleveland and L. W. Parker. It is as follows:

The mills are paying under the three-mill tax for education.....	\$44,802 16
The mills are paying, in addition to this, per annum for schools, including salaries, fuel, school expenses.....	\$27,512 54
The amount paid for poll-tax by those connected with mills.....	\$7,994 00
The value of school buildings furnished by companies.....	\$74,975 00
Value of school equipment.....	\$11,189 00
Average months school run per annum.....	8.86
Total enrollment per annum.....	7,433
The average attendance of the schools.....	4,731
Is tuition free?.....	All free
Churches in villages of mills.....	93
Value of same.....	\$159,500 00
The companies have contributed towards erection.....	\$90,595 00
Companies pay per annum in assisting churches and Sunday-schools.....	\$5,208 00]

Meridian, Miss.

Louis Cohn, general manager Meridian Cotton Mills, Meridian, Miss.: Our plant is located outside the city limits, thus precluding the attendance of our employees' children at the public schools. On this account we erected at our own expense suitable schoolhouses and furnished teachers until better facilities could be had. The attendance has grown to such extent that a regular school district has been established and the advancement of the pupils has outgrown the facilities. Some of our employees live in the city limits, and these enjoy the facilities of the best-known schools anywhere. They are taking advantage of the facilities, and we encourage attendance at all times. We have a petition in before the board of education now, which will be acted on in a few days, asking that we be permitted to enter children of our employees living outside of the city limits on paying a reasonable fee, and our corporation expects and is anxious to pay this fee per pupil without calling on the parents for the outlays.

Gastonia, N. C.

J. D. Moore, president Modena Cotton Mills, Gastonia, N. C.: All our 10 mills in Gastonia have good modern schoolhouses, and until three years ago, when our present graded-school system was inaugurated, the mills, at their own expense, furnished first-grade teachers for 10 months in the year. We are exceedingly anxious that all our children get the benefit of our graded-school system, but in some instances, on account of worthless, vampire fathers, that will never be the case

until we have a law compelling children from 6 to 14 or 16 years of age to attend several months—not less than four every year. Do you know that the mill people of the South are better cared for than the same class of people in any other part of the world? You will find, by investigating the subject, that this is true. The reason for it is that very often the millowners, bosses and operatives are all closely related. To illustrate: I am part owner and manager of six mills in which work men and women who are sons, brothers-in-law, cousins, etc., of mine, and many of them are related to prominent families of our State, but on account of financial reverses had to enter the mill. No such conditions exist anywhere else in the world, to our knowledge. I am working a family whose mother is a niece of a former treasurer of this State; also some who are related to a senator of the United States and of a judge of the Supreme Court of the United States. I mention these facts merely to show you the kind of material we have among the operatives of our Southern mills. We love our people, and they, in turn, are loyal and true to us.

J. K. Dixon, secretary and treasurer Trenton Cotton Mills, Gastonia, N. C.: Our mill schools are all conducted by the superintendent of graded schools for the city. The mills furnish free of charge the school buildings, and the city the teachers. Our State provides for a four months' school term. The city supplements this fund by a tax of 30 cents on the \$100 valuation of property, thereby bringing the school term up to nine months a year. As this is largely a mill town, the mills pay the larger amount of taxes. We encourage our children to take advantage of an education, and we believe that they are doing so to a larger extent than ever before.

Charlotte, N. C.

Thos. J. Lillard, secretary-treasurer the Fidelity Manufacturing Co., Charlotte, N. C.: From observation during my 18 years' experience in manufacturing cotton, there had not been a great deal of help given by the mills up to within the last few years, but for the last 5 to 10 years no one can dispute but that there has been a great deal of help and encouragement given by the mills, not in education alone, but in many other ways, to bring about a social improvement among the cotton-mill people. The writer has never done a great deal personally at one time to help the cause of education, but his help has extended over a period of many years, commencing as far back as 1879. This mill has made no direct contribution to the cause recently, as we have graded schools that are available for our help now.

Edgefield, S. C.

R. A. Ballowe, vice-president and treasurer the Edgefield Manufacturing Co., Edgefield, S. C.: Among our other buildings we have a schoolhouse, where we employ a competent teacher at our own expense, furnishing free tuition to the children of our operatives.

Birmingham, Ala.

Chas. H. Abbott, secretary Avondale Mills, Birmingham, Ala.: At the Avondale Mills is conducted a free school for the employees, funds for which are supplied by the county for public-school term of usually about six months. This term is extended at the expense of the mill usually to about nine months if the attendance warrants it. Two teachers are employed in this school, and the attendance is usually very satisfactory. The school building is owned and equipped by the mill. It consists of a neat two-story building built on the plans of the eight-room houses in the mill village. The day-school department occupies the entire upper floor,

with the primary department in one room of the lower floor, and in two other rooms of the lower floor is the kindergarten, carried entirely by the mill's expense, being supplied with two teachers and the usual kindergarten paraphernalia. The other room in the same building is a public library with about 1000 volumes, looked after by a competent young lady and kept open every day in the week and until late each evening. Near this building is situated a free bathroom, which is supplied with both shower and plunge baths, and is all the time under the charge of a competent yardman with police authority, who sees that order is maintained. If a great many of the agitators would get themselves informed before making some of their ugly charges they would not find themselves in the ridiculous position of having talked a great deal about things of which they knew nothing.

Stubbs, N. C.

T. D. Lattimore, secretary Buffalo Manufacturing Co., Stubbs, N. C.: The Buffalo Manufacturing Co., a corporation with only \$42,000 capital stock, has at its own expense furnished ground and erected a schoolhouse costing \$500 for the use of its employees and others, in which a public school is taught.

East Durham, N. C.

J. Harper Erwin, secretary and treasurer Durham Cotton Manufacturing Co., East Durham, N. C.: In response to your inquiries addressed to this and the Pearl Cotton Mills—which latter mill is under the same management as this—beg to report that one of our mills is located in North Durham and the other one in East Durham, some two miles apart, and both of them are in close touch—in almost a stone's throw, in fact—of large, handsome, well-apportioned and conducted public schools. One of these schools is supported by taxation from the city of Durham, and the other one, which is outside of the city limits, is supported by the county. As all of our employees of school age have not only access, but are urged to attend these schools, we have not found it necessary to contribute to the support of these schools other than in annual taxation. We wish to say, however, that we have always encouraged our employees to attend these schools, and some years ago we instituted a ruling that we would not employ anyone under the age of 12 years. We contribute materially towards the health and good of our employees in many ways whenever we find that it is needed.

Concord, N. C.

W. R. Odell, treasurer Odell Manufacturing Co., Concord, N. C.: Ever since we have been in the manufacturing business we have always taken an interest in the education of our employees. For many years we paid for the services of a teacher and furnished a house. After the graded schools were established in our town we furnished the school building free of charge to the school board. We have assisted in building churches at the three different mills which we control in this State.

Knoxville, Tenn.

James Maynard, president Brookside Mills, Knoxville, Tenn.: We are somewhat differently situated from many of the Southern mills. Our mill is located in the twelfth civil district of Knox county, one of the wealthiest and most populous counties in East Tennessee. It is also just beyond the corporate limits of the growing city of Knoxville, with a population of upwards of 50,000. Our people for the most part live in rented houses of their own, either in the city adjacent to the mills, or in the civil district of the county, also adjacent to the mills. Properly speaking, we have no mill village, though we have a few houses which are

occupied by some of the families of our employees. The city of Knoxville and the county of Knox have as fine a public-school system as any community in the South, and so far as we know our people avail themselves of it for the education of their children. This company is one of the largest taxpayers in the county, and beyond this, the circumstances being such, we do not feel we are called upon to maintain or contribute to separate schools. The individual members of the management gladly give of their means wherever they feel that their contributions will be beneficial, either to individuals or to churches. There is a law of the State of Tennessee which prohibits, under a severe penalty, the employment of persons under 14 years of age. This law is strictly adhered to by this company, and if there is any doubt whatever of the age of any persons employed the parents are required to make affidavit to the facts. Our employees, nearly 1100 in number, are all native born, with three or four exceptions. Seventy-five per cent. of them are native Tennesseans, and as the company has maintained from the beginning a strict policy of weekly payment of wages, our employees are at perfect liberty to use their earnings in their own way as they may see fit. As schools are supplied by the city and county on every hand, we do not feel that it is a part of our prerogative to dictate either how much or how little schooling any parents should allow their children. No hindrances or obstructions are placed in the way by the company of any person who desires to go to school. Indeed, in the winter time and during school session it is not always an easy matter to obtain a full supply of youthful help, whereas in the summer time, during the vacation, we are ordinarily overrun with applications for work. If we were differently situated it would undoubtedly be the policy of the company to support schools and a library for the use of its employees. We do not believe there is a mill anywhere in the South that would be so shortsighted as not to wish its employees to avail themselves of all the education it would be possible for them to obtain. Ignorance is not a good recommendation for useful help.

Roanoke Rapids, N. C.

John L. Patterson, manager Rosemary Manufacturing Co., Roanoke Rapids, N. C.: We have always taken a great interest in the education of the children in our village, and have erected a modern schoolhouse with modern desks, etc., at a cost of \$1200 for the use of the children in the village. Last year we held an eight months' term of school, and expect to do the same this year. This house is also equipped with electric lights, and is tendered to the operatives for concerts, suppers, etc., which they frequently give. We trust this information will be of some assistance to you to refute the criticisms advanced by cranks who know nothing of the conditions existing in Southern cotton-mill villages.

West Point, Ga.

L. Lanier, president the Lanett Cotton Mills, West Point, Ga.: Your favors of the 26th, addressed to the Lanett Cotton Mills, the West Point Manufacturing Co. and the Riverdale Cotton Mills, are received, and as I am president of these three mills, I will answer your three letters in one. At each of the mill villages of the three cotton mills I represent we have three schools as good as any in the county, buildings all built from architect's designs, all modern improvements, heating and lighting, modern desks, built and equipped by the three cotton mills at an expense of about \$10,000. We have always supplemented the public-school fund when necessary, and have had employed

as good teachers as any schools in the county. We have in the three mill towns something over 500 pupils attending school. Our corporations provide heating and lighting, pay the janitors, in addition to supplementing the public-school fund, and in addition to these we have kindergarten school with more than 100 children attending, with all the paraphernalia of first-class kindergartens, conducted solely at the expense of the mills. These schools are conducted with a view to training the smaller children from the ages of four to seven. In addition to this expense of helping the public-school fund and maintaining these kindergartens, we have provided libraries in the direction of the education of the children, and these are carried on by the mills, not requiring aid from anyone.

Anniston, Ala.

H. F. Williamson, agent American Net & Twine Co., Anniston, Ala.: We have a school building on our property, and maintain a continuous nine-month session. A portion of the funds for this school we receive from the State, and the balance we pay ourselves. In all probability we have paid out during the past seven years that we have been located here several hundreds of dollars for school maintenance, for the cost of the building and maintaining of same. In addition to this, we have church and medical facilities which are unsurpassed by any mill of its size in the South.

Piedmont, S. C.

James L. Orr, president-treasurer Piedmont Manufacturing Co., Piedmont, S. C.: The Piedmont Manufacturing Co. has maintained a graded school for its employees for the past 20 years, furnishing schoolhouses and heating same without charge, and has contributed from \$1000 to \$1500 per annum, in addition to amounts received from State and county. The schools have a total enrollment of about 650 scholars, and are run 10 months in the year. I do not know of a single mill, large or small, in this section of the State that is not contributing to the maintenance of schools from its private funds.

Burlington, N. C.

W. C. Thurston, secretary and treasurer Hiawatha Manufacturing Co., Burlington, N. C.: We have schools within one-quarter of a mile of the mill at Gibsonville that run five months in the year. Elon College is situated just two miles from the mill, and the writer has always done all that he could to get the children to go to school. I am a firm believer in good schools and a good attendance by the children. There is not as full an attendance at Gibsonville as there should be, largely due to the fact that the parents in a great many cases think that the children should help them earn a living instead of going to school. I have given personally to the school at Gibsonville, but I do not know whether the mill has done anything toward the school or not, as I only took charge of it a year ago. All the children that will go to school have ample facilities; the buildings are comfortable and the schools are not crowded.

Two Historic Mills.

T. I. Hickman, president and treasurer Graniteville Manufacturing Co., Augusta, Ga.: The Graniteville Manufacturing Co. has always maintained schools for the children of the operatives, and has insisted upon the children attending these schools. While education is not absolutely compulsory, we have always made every effort to induce the children to attend these schools by making them as attractive as possible. We have two excellent schools, one at our Graniteville mill and one at the Vaulcluse mill. While it is true that we obtain a certain amount of State aid for the maintenance of these

schools, we keep them up to their high standard out of our own funds, furnishing besides the buildings and equipment. Our average subscription to schools amounts to \$2000 per annum. From personal observation I think you will find that nine mills out of ten in the Southern States maintain schools for the benefit of the children of their operatives.

Griffin, Ga.

W. J. Kincaid, president the Griffin Manufacturing Co. and the Kincaid Manufacturing Co., Griffin, Ga.: The Kincaid Manufacturing Co. and the Griffin Manufacturing Co. have for years past strenuously endeavored to educate the children of their employees. The Kincaid Manufacturing Co. has in operation a free kindergarten school for its young children, and our two companies furnish free tuition to the public schools of our city for all children of our employees between the ages of six and twelve years, and the officers of our two companies do all they can to induce our children to attend school. And I am pleased to say that school attendance from our mill people is increasing every year, and in time we hope all will secure at least the elements of learning.

Gainesville, Ga.

R. E. Green, manager the Georgia Manufacturing Co., Gainesville, Ga.: Our mill is located within 300 yards of the city public-school buildings, where we have a well-organized system of public schools, which is carried on nine months in the year, and as many of our children as the parents can afford to send to school are in attendance of the school all the time. Some of them are very bright and apt scholars. We encourage the parents of our children help to keep them in school as much as possible. The tuition is entirely free, and the books are almost free. Our building for white children will accommodate 1200 pupils.

Lawndale, N. C.

H. F. Shenck, president Cleveland Mill & Power Co. No. 2, Lawndale, N. C.: We have for 16 years supplemented the ordinary school tax to the amount of \$100 each year for the purpose of extending our free-school term for the benefit of the hands in our employ, and we also have built a comfortable school building, free of charge to anybody, for their use in the village, where our principal office is. Within the last three years we have assisted in erecting a very large school building, with four large recitation rooms, which is substituted at present for the building we originally put up for our help, and we continue to contribute \$100 per year, which extends the free-school term for one month to all our employees. We also as much as possible arrange and urge our help to avail themselves of the opportunity afforded in acquiring an education, getting in extra help and letting hands who show a disposition to educate themselves out of the mill to go to school during the school term.

Mobile, Ala.

M. W. Dunlap, president Mobile Cotton Mills, Mobile, Ala.: This mill built and equipped, at its own expense, a school and church costing about \$1000, and we have furnished books and coal free of charge, but find that the parents will not compel their children to attend school, though we have done everything we could to get them to do it, as we recognize that the more intelligent our hands are the better results we can get, and we have had more to contend with in the ignorance of the people we employ than almost everything else put together. There is no law for compulsory education in this State, and the parents do not seem to care whether their children receive any education or not, and, in fact, a great many of them have stated

that they have no education themselves, and it is not necessary for their children to have any. This school is maintained for nine months out of the year, and there is absolutely no expense for any of the children to attend it, yet we never at any time get an attendance of over half of those who are in the mill village who are eligible to attend, and while the others are not at work they play around the streets and do not go to school, and half of those who go do not attend regular, and there is no way of compelling their attendance.

Batesburg, S. C.

Middleburg Mills, Batesburg, S. C.: The corporation here has an established school for the children of the mill employees, as we consider this as an absolutely necessary feature to further the interests of the mill, as well as the employees. We are assessed a county and town tax for school purposes, but this does not pay for our school, as we are compelled to run our school independent of any county or town. The average Southern mill is doing more for its employees than the Eastern mills, as they find down here that money spent in channels of this kind is repaid fourfold.

Stonewall, Miss.

T. L. Wainwright, president and treasurer Stonewall Cotton Mills, Stonewall, Miss.: Our company long ago donated a school building and lot for the benefit of our employees, the expenses of teachers being borne by the State. We being the second largest taxpayers in our county, we therefore contribute our full quota. We have also furnished free a hall for the use of our employees, and are now preparing to build a new and much better and more commodious building, free of all charge to the county or our people, to be used as a school building and hall. Our people have ample facilities for giving their children a reasonably fair English education free of any cost to themselves.

Enoree, S. C.

Franz Engels, secretary Enoree Manufacturing Co., Enoree, S. C.: We have built for our employees a church provided with furniture and organ. We built and furnished a schoolhouse, and pay \$800 annually for teachers. We have a building provided with piano, stage and dressing-rooms, also all equipments for a lecture-room and library, for the amusement of our people. We also have a baseball ground, and contribute to the maintenance of a baseball team among our boys.

Augusta, Ga.

James P. Verdery, president Enterprise Manufacturing Co., Augusta, Ga.: In addition to the free public schools of this city and county, we maintain a school of our own for the education of the children of our operatives, without any charge to them whatever, which costs our company about \$500 per annum. We do this in our own interest as well as in the interest of the children, believing that educated help is far more desirable than uneducated.

Columbia, S. C.

J. S. Moore, Richland Cotton Mills, Columbia, S. C.: The Olympia, Granby, Richland and Capital City mills are under one president and the same management. All kinds of work along the lines of schooling and improvement for the operatives, has been done for the four villages, not separating the mills. Along this line a kindergarten has been established in each mill village and maintained at the cost of the corporations altogether. These schools are well attended, and are doing good work. The mills also maintain schools in the villages which are free to the children of our operatives. The teachers are required to visit the families living in the villages and to solicit the pupils. At the same time our overseers are in-

structed not to take children that should go to school, as it is our endeavor to in a manner force every child to attend school during the session. There being no law to compel school attendance, makes it doubly hard for us to insist upon the children attending school. The above is done by the mills themselves. There is also a tax upon the mills for school purposes, this fund being used in the common schools of our counties. To encourage and make more interesting the work along these lines, we also have reading-rooms, gymnasium and armory. The expense of all these institutions is borne by the companies. It is the endeavor of the present management of these companies to do all in their power to elevate their operatives both morally and physically.

Louisville, Ky.

Philip S. Tuley, president and treasurer Louisville Cotton Mills Co., Louisville, Ky.: Our mill is located within the city limits of Louisville, and our help is scattered from one end of the city to the other, some of it being derived from neighboring cities across the river. Therefore, however much we might desire to contribute to the betterment of their condition, we do not find it at all practicable. Both day and night schools are within reach of all children within school age, and also many sectarian schools, which they seem to prefer, owing to the large Roman Catholic element in our immediate vicinity. We make no contributions to schools in any way.

Atlanta, Ga.

F. I. Stone, president Elizabeth Cotton Mills, Atlanta, Ga.: Your circular-letter of the 26th, enclosing slip in reference to the assertion that Southern cotton-mill men are seeking to prevent their operatives from receiving a schooling, has been received and carefully noticed. We beg to say that, so far as we are concerned, this statement is wholly devoid of truth, and we know it to be the case as to other mills in this section. While our mill is a small one, yet we have erected in our village a church. We maintain a free school for our operatives for nine months in the year, and also a free library. The operatives pay for nothing except their school books. Our school is run exactly upon the same system as the public schools of this city. Our mill is located some seven miles out. We are spending in this direction from \$1000 to \$1500 per annum, which is quite a heavy tax for a 5000-spindle mill, besides paying regular taxes on our property to State and county authorities.

Raleigh, N. C.

F. O. Moring, secretary and treasurer Caraleigh Mills Co., Raleigh, N. C.: Three years ago we built for our people a clubhouse and library and furnished them with a number of books and subscribed annually for a number of the best weekly and monthly magazines. There is no private family, outside of the most wealthy people in the city nearby, who have access to better reading-matter than our help. In addition to this, we added \$1000 to the district school appropriation for the purpose of building and equipping an up-to-date school building. The same is now open full terms for both fall and spring sessions. We employ no help in our mill under 12 years of age. All the children at our place have the opportunity of attending school free of cost, and books are furnished to all who are not able to buy them.

Anderson, S. C.

H. C. Townsend, cotton mill, Anderson, S. C.: All the children under 13 years of age are urged to go to school, and when they don't go it is the duty of the teacher to hunt them up and see why they don't go, and the parents are seen and asked to make them attend school. Now,

larger and older children do as they please; if the family is very poor, they work; but they can attend school free if they wish. The Cox Mill, Brogan Mills and my mill club together and each bears its part of the expenses of building and teachers and patent desks. As long as the public money lasts we use it, and when it is out we pay the balance according to the number of pupils each mill sends. The schoolroom is a brick building, well lighted, and taught by the best teachers in the city. The desks are patented, and are as nice as used in the city schools, and everything is as good as the city schools. The mill operatives in Anderson, S. C., certainly have no kick to make, as they get the best.

Albemarle, N. C.

J. F. Cannon, treasurer Wiscasset Mills Co., Albemarle, N. C.: We have an eight-room school building, which cost us \$1784; employ one superintendent and five teachers; school lasts eight months each year.

J. S. Efrid, treasurer Efrid Manufacturing Co., Albemarle, N. C.: Some three years since our mills erected a commodious school building to be used exclusively for the education of the children of the mills. From that time the school has gradually grown, until we now have something like 200 enrolled. We have five lady teachers, in addition to our superintendent, and our school runs nine months every year. The school is controlled exclusively by our mills, all the expenses for the support of the school being paid by the mills. The people on a whole are intelligent, and rapid strides are being made to advance the education in our State.

Woodruff, S. C.

Aug. W. Smith, president and treasurer Woodruff Cotton Mills, Woodruff, S. C.: We have only been running two years, and we have had a school continuously all of that time. We have just completed a nice schoolhouse at a cost of \$1200, and have two teachers employed, and run the school 10 months in the year. The public-school fund is too small to enable us to do this, but we supplement whatever is needed. We also propose to have this winter a lyceum course, consisting of lectures and magic-lantern exhibitions. We are always thinking of the betterment and comfort of our employes, and all through the year give entertainments of different kinds. We not only require them to send their young children to school, but a great many children over 12 years of age who are working in the mill we allow to attend school during the school months. I know from my own knowledge that there is not a mill in this community which does not pay a great deal of attention to the education, comfort and happiness of their employes.

Rock Hill, S. C.

R. T. Fewell, president and treasurer Arcade Cotton Mills, Rock Hill, S. C.: The Arcade Cotton Mills is within the incorporate limits of the city of Rock Hill, and is sufficiently close for the children to attend both school and religious worship. But in order that they will have no reason for not sending their children to school, the Arcade Mill has put up a modern frame school building, well equipped and ventilated, at a cost of something over \$1500. We pay for the services of a teacher for free kindergarten for the school; this is at one end of the school building, and is well attended. It is the business of the heads of the departments in the mill to see that the children attend this school. In the other portion of the building we have free graded-school system, and every effort is made to have all the children attend regularly, no charge being made them at all. We heat the building and supplement the salary of

the teachers, who are under the regular graded-school system of the city, and we have very efficient service. At the kindergarten we have an elegant piano, and have music and Sunday-school services every Sabbath. We pay taxes also for school purposes, which amounts to considerable.

Union, S. C.

John A. Fant, treasurer Monarch Cotton Mills, Union, S. C.: We have just completed a handsome new schoolhouse at a cost of \$4000. We have three teachers, which are furnished to the mill operatives by the mill company free of cost. We have also contributed several hundred dollars to the building of two churches in our village, and will contribute more to another that will soon be under way. We are always willing to help in any way in our power for the upbuilding of our mill operatives.

Chester, S. C.

Wm. G. Nichols, secretary and treasurer the Springstein Mills, Chester, S. C.: As our mill is situated in the center of the town of about 5000 inhabitants, which antedates by many years the establishment of the mill, we have not had occasion to do anything directly towards supplying educational facilities for the children of our employes. Our city taxes amount to about one-tenth of the total amount levied, and this does not include the additional tax paid to the county. Some of the ladies of the city maintain here for the benefit of the small children in the mill village a free kindergarten, which is held in the basement of a building owned and in a large measure supported as a mission chapel for the mill district by the Presbyterian church of this city. The mill aids to some extent in the support of this chapel, and those directly interested in the mill also contribute a considerable portion to the support of the kindergarten.

Jonesville, S. C.

J. J. Littlejohn, president and treasurer Jonesville Manufacturing Co., Jonesville, S. C.: In reference to the attempt on the part of some to disseminate the impression that Southern cotton-mill men are seeking to prevent their operatives from receiving a schooling, only a little investigation will disperse the idea and reveal conditions as they really exist. I doubt whether it would be wise for mill-owners to join issue with those who make this statement, for the reason that the contrary stands out so self-evident; but a little discussion of the subject will serve only to demonstrate more fully and forcibly what has been and is being done by mill authorities in this direction. As light and shade produce the most attractive effects in a picture, so the discussions pro and con will reveal the matter as it actually is. Without stating the vast difference between educated and uneducated labor, the advantages preponderating largely in favor of the former, I will submit a few facts as cumulative evidence of what the mill authorities in the South have done to accomplish the ends tending toward the education of their operatives. For example, in my town we have two mills, of which I am president and treasurer, employing several hundred operatives. In 1900, with a town population of 500, the school enrolled 75 pupils in a small wooden building built by private subscription. That year the mills were built, and today we have a population of 1200 and are erecting a \$5000 modern school building and have 175 on the roll. I have been one of the chief promoters of the graded school here, and last winter we voted a special tax levy to build and equip the building referred to. The mills are paying one-half the tax of the entire nine-mile school district, and we are educating

the mill children free of cost to them. Before school opened in September I posted notices in each mill that it would be expected that at least one child from each family would attend school, and have been compelled to stop several machines for lack of help caused by reason of their attending school. My observation is that this sentiment pervades the South, and the millowners are the chief promoters. To keep them in ignorance, as it is alleged we are trying to do, can serve only to bring detrimental results to us. But aside from pecuniary reasons, I feel that the mill men of the South feel a still greater interest in education. We are ever mindful of the sublime maxim: The foundation of every State is the education of its youth. The subject of education touches every phase and fiber of life. It is indispensable and inseparable from success. There is nothing so cheap as knowledge, and nothing so costly as ignorance. The idea that we want ignorance to supersede intelligence in our mill districts is simply a phantom of the imagination bred of ignorance. It should be gratifying to those against whom this false and malignant charge is made to know that the effect will but add more light to their magnanimous efforts. Like a torch in the hands of the people, the more it is shaken the brighter it will burn.

Laurens, S. C.

Ware's Shoals Manufacturing Co., Laurens, S. C.: Our mill is not yet in operation. We commenced to build about 18 months since, and one of the first things we did was to give our employes a comfortable house, rent free, in which to carry on a free school. The school was well attended last year, and is now in a flourishing condition. As the place grows we expect to provide a larger and better house and to contribute liberally to the support of the school, in addition to the taxes we will pay and the assistance we will get from the free-school money.

Elizabeth City, N. C.

James G. Gregory, secretary and treasurer Elizabeth City Cotton Mills, Elizabeth City, N. C.: For the past two years we have been contributing directly towards the maintenance of a school in the factory district, almost entirely attended by the children of mill employes; in fact, we believe but for our encouragement and aid, together with that of the Elizabeth City Hosiery Mill, it would have been impossible for the school to have existed. Our relations with our employes are personal, and they fully understand that we are ready at all times to help them in any efforts to better their condition. We invite investigation from any who are skeptical.

Cooleemee, N. C.

T. V. Terrell, secretary and treasurer Cooleemee Cotton Mills, Cooleemee, N. C.: This company has erected, at its own expense, and at a cost of between \$6000 and \$7000, a school building to accommodate 400 pupils. It is one of the handsomest, best-appointed and best-equipped buildings in this section of the State. In addition to this, the company supplements the regular school fund by a donation sufficient to guarantee an eight months' school term. We have the only graded school in this (Davie) county, and the only public school in the county having a longer term than four months. The amount of taxes paid by the company to the State school fund amounts to about \$700 annually. The company has also donated sites and contributed liberally toward the erection of four churches—Presbyterian, Baptist, Methodist Episcopal and Protestant Episcopal; also has erected a public hall to be used for lectures, entertainments and public worship for denominations without

church edifices. A large sum of money has been spent by the company in improving old roads, opening up new ones, and in the erection of a steel bridge over the river for the benefit of the people living in this vicinity. We are always glad to encourage anything intended for the benefit of our employes, and to adopt any new measures which will afford them additional comfort and happiness.

A Group of Four.

Allen Jones, treasurer Lexington Manufacturing Co., Lexington, S. C.; Saxe Gotha Mills, Irene, S. C.; Palmetto Cotton Mills, Columbia, S. C.; Middleburg Mills, Batesburg, S. C.: At Lexington our mill is inside the incorporation, and the children attend the public school. At the Saxe Gotha Mills we have an up-to-date school building, thoroughly equipped at a cost to the mill of \$1000, and the mill supplements the county funds to keep the school going nine months. For the Palmetto Cotton Mills we have a nice building for the school, with all improved school furniture in the mill village, and keep the school going as long as the city schools. Middleburg Mills is inside the corporation, and most of the children go to the public school. We have, in addition, a small school in the village which we furnish free. Of course, we all pay the regular three-mill school tax.

Rocky Mount, N. C.

Thomas H. Battle, treasurer Rocky Mount Mills, Rocky Mount, N. C.: We have on our place a good schoolhouse, built and equipped by ourselves at an expense of about \$1400. The school term is nine months, the county paying the teachers for three months and the mills the remaining six. Two experienced lady teachers are employed, and the school is doing a vast amount of good. We encourage our people to educate their children, and nearly all of the families employed by the mills are taking advantage of the facilities offered them. Between 60 and 75 children attend the school, and a large per cent. of this number are old enough to work in the mills.

Piedmont, Ala.

J. W. Hawke, secretary and treasurer Coosa Manufacturing Co., Piedmont, Ala.: We are interested in having our children to know how to read, write and calculate. It is our object to give every child connected with the mill a start in this direction, believing the spark, if a live one, cannot be suppressed, but with the fanning we give it will burst into a flaming desire for a higher education. Our local school board has granted us 12 free scholarships for those promoted from our primary school. This is all we have asked as our proportion of the school-tax fund, as our larger children have full privileges of the school. We spend on our private school about \$500 per year. Everything is absolutely free, as we think a public school for people unable to buy books, etc., should be. We are teaching 51 little tots to read, write and calculate, most of whom would probably not have such an opportunity if we did not offer it. We are interested in the matter, realizing that it cannot be told where the start we are giving may lead them to.

Jackson, Ga.

George H. Lanier, superintendent Papperton Cotton Mills, Jackson, Ga.: It gives us pleasure to state that our company not only furnishes, without cost to the county, the public-school building in which we have the usual nine months' term, but that the appropriation from county not being adequate, we go to considerable expense each year to maintain same. We take quite a pride in our school, and encourage the parents to send their children.

NEW YORK TO CALIFORNIA WITHOUT A STOP?

A Fireless, Smokeless, Waterless Locomotive as a Possible Wonder of the Day.

[Editorial Correspondence Manufacturers' Record.]

New York, October 7.

"If you think Hoadley is enthusiastic about that locomotive," said a leading railroad official, "you ought to hear our general manager talk it about." Such was a statement made by one of the leading traffic managers of the country in referring to the views of one of the greatest of railway operating and technical experts of the country as he walked out of a room where he had examined the blueprints of a locomotive to be built for the Southern Pacific Railroad under the Hoadley-Knight patents. And thereby hangs a tale. Two years or more ago the Southern Pacific Railroad, impressed with the revolutionizing possibilities of an internal combustion locomotive based on the principle of the Diesel engine, gave the International Power Co. a contract for such a locomotive. Reports about the immense saving which these locomotives and internal combustion engines would effect spread through financial circles and started a wild speculation in the stock of the International Power Co., which soon went to 190, with the "street," as Wall street is familiarly called, wondering where it would stop. In the meantime, Joseph H. Hoadley, the president of the Power Company, and the man credited by the street with being responsible for this fever of speculation, was sick in bed, while others were pyramiding the stock. The latter, unable to carry their load, suddenly dropped out, and the International Power dropped down in two hours to 110. Then Wall street had a wild panic, but Hoadley demonstrated his good faith and confidence in the intrinsic merit of International Power stock by ordering his brokers to buy all that was offered, until more than \$4,000,000 out of his private fortune were so invested, to check the downward rush and to protect the interests of his associates. But in spite of all that, he got the blame and not the profits of the wild gamble, but in this he was only getting what Morgan, Kuhn, Loeb & Co. and others caught when the Northern Pacific corner created a wild panic, on, of course, a much larger scale, and what every great operator once in a while catches, whether deserved or not. Two years of illness kept him in check, and most of the time away from business. Many of his friends, including the writer, urged him to reply to the vicious attacks on him and to set forth the true situation. He said it would be useless, and added: "I will bide my time and wait till I have done what I started to accomplish; then I shall not need to explain, for everybody else will be explaining for me." And so "Joe" Hoadley, as his friends call him—"Hoadley of International Power fame," as his enemies call him, and the title given by his enemies will doubtless in time prove the highest business honor which can be bestowed upon him—bided his time, and with health restored perfected his inventions. As a mechanical genius the world has probably few superiors, while his business abilities rival his mechanical activities. And now the Hoadley-Knight locomotive—Walter Knight, known throughout the electrical and mechanical world, being Hoadley's co-worker—has been perfected, and the two-year-old contract of the Southern Pacific for a locomotive of this type is being rushed to fulfillment. The American Locomotive Co. is building at Schenectady the trucks and framework; the Corliss En-

gine Works of Providence, owned by the International Power Co., will build the Diesel engine equipment, as it builds all Diesel engines, and the General Electric Co. the electrical parts. Why should the building of a new type of locomotive awaken such speculative interest, and why should the railroad man whom I met examining the blueprints be so enthusiastic over it? Granted half that is claimed for this locomotive and there would be good reason for both, but it looks as though it will meet all that is claimed for it. The Diesel internal combustion engine is not an experiment. Hundreds, large and small, are proving their value to steam-users; in fact, the Diesel seems to mark a very distinct new epoch in power development, and power—cheap power—is the dominant factor of the world's advancement. The new locomotive is an application of the Diesel principle to railroad work. The Southern Pacific locomotive of 200,000 pounds weight will, so the experts say, carry in a tank underneath the body sufficient oil to run a train without smoke, without fire, without cinders, without water, and without the necessity of a single stop from New York to San Francisco, and do it all at a cost so small that the layman hardly dare to mention. If a clear track were afforded, experts say that such a spectacular run from the Atlantic to the Pacific would really be a possibility. This locomotive will burn the cheapest of

crude oil, and so small a quantity that its use will no longer be confined to the oil regions of Texas and California. It cannot be said to be an experiment, for there is not a single part about it that is not in practical use. It is simply the putting together in locomotive shape of what is now in daily use, getting vastly-increased power and reduced cost through some new applications. No wonder, then, that the railroad men who have studied the matter and the man who for two years has bided his time feel that the world is entering upon a new period in everything which pertains to the use of power, whether it be in the locomotive, in the steamship, in the automobile or in the stationary engine. And the man who could bide his time is now the owner of a controlling interest in the International Power Co., which owns the Corliss Engine Works of Providence, the Wheelock and Greene engines, the American Ordnance Works Co. of Bridgeport, maker of rapid-fire Hotchkiss and Maxim guns, while he and the Power Company jointly are largely interested in the American Locomotive Co., with its \$50,000,000 of capital, of which he was the organizer. Controlling or largely interested in enterprises that, strictly as machinery builders, from guns and engines to locomotives, are among the greatest in the world, employing in the aggregate many thousands of hands, it is said that of all the hundreds of machines of the heaviest or of the most delicate workmanship that these thousands of men are daily handling, there is not a single one which "Joe" Hoadley—"Hoadley of International Power fame"—could not operate on a moment's notice.

R. H. E.

ANXIOUS TO WELCOME FOREIGN SPINNERS.

At many points in the South interest in the proposed visit of foreign cotton spinners is on the increase. Mr. Emslie Nicholson of William A. Nicholson & Son, bankers, Union, S. C., writes:

"I have taken steps to have a formal invitation issued by the Chamber of Commerce of Union to the cotton manufacturers of England to visit Union, and I hold myself in readiness to do anything I can to secure the visit and to make it as pleasant and profitable as I can. I should think that Union would be a particularly interesting manufacturing town for them to see, especially in view of the fact that probably the handsomest mill in the South is located here, and that the development of this industry has taken place since 1893, when there was not a spindle turning in Union county. Now there are 250,000."

The Columbus (Ga.) Board of Trade has sent an invitation to the president of the Federation of Master Cotton Spinners' Associations at Manchester, England, and Mr. John C. Coart writes to the Manufacturers' Record urging it to use its good offices toward an acceptance of the invitation and tendering his services for the pleasure and interest of the party.

The Commercial Club of Birmingham, Ala., has adopted the following resolution:

"Resolved, That the Commercial Club of Birmingham, recognizing the great good to be derived through a better acquaintance of the Southern business men with the English spinners who use so large a part of our cotton, hereby endorse the invitation extended these business friends to visit America, and pledges itself to aid in every way possible the efforts made to have them accept."

"Resolved further, That we urge the business organizations of all Alabama cities to interest their communities in this matter, and have committees appointed to

act in conjunction with this club in perfecting at once plans that will make this invitation operative."

To carry out this resolution the club appointed a special committee consisting of Messrs. W. D. Nesbitt, B. B. Comer, Eli P. Smith, E. W. Barrett, J. J. Smith, W. J. Cameron and W. P. G. Harding.

Mr. C. B. Geotchins, secretary of the Board of Trade and Commercial League of Rome, Ga., informs the Manufacturers' Record that these two commercial organizations will extend an invitation to the Englishmen to visit that city.

The Little Rock (Ark.) Board of Trade has sent the following invitation to Mr. G. W. Macara, president of the Federation of Master Spinners' Associations:

"In case of the acceptance on your part of the invitation to the cotton manufacturers of England to visit the cotton trade of the South, we desire to extend to you a most cordial invitation to visit the State of Arkansas, to partake of the hospitality of the members of the Board of Trade of Little Rock. We believe that a visit on the part of yourself and friends to the country west of the Mississippi river will be a most pleasant revelation, and that the occasion will be one of mutual enjoyment. No better cotton is grown in this country than that raised in the Arkansas valley, and at no point will you receive a more cordial greeting and sincere welcome than in the city of Little Rock."

Mr. J. Arthur Hutton, vice-chairman of the British Cotton-Growers' Association, writes from Manchester to the Manufacturers' Record as follows:

"This association is, of course, taking the greatest interest in any movement for the extension of cotton-growing in any part of the world, though by the terms of the Royal Charter, which has been recently granted us through His Majesty the King, our actual efforts are limited to

the British Empire. The view, however, which we take of the cotton situation is a broad one, and we are convinced that the more efforts which are made to extend the cultivation of cotton throughout the world, whether in British colonies or in America, the better for everyone. We might go so far as to suggest that our association is fully deserving of support from American manufacturers, because if there is a shortage of cotton proximity to the cotton fields will give no great advantage—a fact which has been proved by the suffering of the Southern States during the last 12 months."

Mr. Gustav Leonhardt, commercial attache of the Imperial German consulate-general at New York, writes:

"As I wish to inform German manufacturers of the intention to invite European cotton manufacturers to a tour of inspection of the cotton-growing States, I should feel very much obliged for all information you can give me. I suppose there is no chance of a meeting at an early date, thus making it possible for German manufacturers to attend at a later day."

Benner, the Prophet.

While the Manufacturers' Record is not by any means a full believer in Mr. Samuel Benner of Dundas, Ohio, as a business prophet, nevertheless it is true that a great many of his predictions in times past have proved out correct. Bearing on the present situation the New York Herald publishes a dispatch from Cleveland, Ohio, which says:

"The remarkable way in which the trade conditions of the present year were foretold in December by Samuel Benner, a farmer of Dundas, has created much comment among the manufacturers of the country, particularly the steel men, who have for years given much weight to the prophecies made by the farmer sage."

"Benner has for many years been announcing, a year ahead of time, the trend of trade, basing his prediction on the proposition that periods of finance and trade move in cycles, and that having once learned from the past the duration of the cycles, it was the easiest matter to foretell the probable course trade and finance would pursue in the future. He covers the conditions of steel, iron, grain and provisions, and has been so successful that steel men watch the predictions."

"Benner lays no claim to supernatural power, basing his predictions solely on lessons of the past. Addison Cammack, one of the great traders in Wall street, watched the predictions for many years, and during the later years of his activity in the market he was guided in his transactions by the predictions of the old man. During the early '90's it is said that it was the prediction of Benner that a cycle of high prices had come that induced Cammack to undertake a campaign which netted him \$4,000,000. He believed that Benner had gained a foresight into the economic laws governing the world of trade."

"When Benner gave out in December his predictions for the present and the coming year he foretold just what has happened. The significant portion of the Benner predictions were:

"I predict that prices for pig-iron, railroad stocks and many commodities will be lower in 1904 than in 1903."

"I predict that after 1904 there will be a revival in trade, better times, and that higher prices will prevail until the year 1911."

"The present down cycle in prices and in general business ends in 1904, and by reason of a protective tariff this country has not had an old-fashioned period of hard times during the past three years. Nevertheless, there has been a stupendous fall in prices and shrinkage in values of

railroad and industrial securities, with a severe decline in iron.

"The year 1905 will be the beginning year of a new up cycle in pig-iron and long-continued prosperity in general business, lasting until the next commercial revulsion, which will be due in 1911.

"When our financial and commercial depressions reach their lowest limits, as determined by the cycles in trade, they afford the best opportunities to make profitable investments of money in property, railroad stocks, industrial securities, manufactures and mercantile pursuits.

"Looking forward beyond 1904 the cycles indicate six years of national prosperity.

"The coming opportunity to catch business and prices at their lowest limits of depression will not happen again for 20 years.

"The prospects of a bright business future were never better for moderate and continued prosperity, but no great boom in prices similar to earlier times, when we had \$50 pig-iron."

The Pig-Iron Market.

Matthew Addy & Co.'s weekly report of October 8 says:

"A few weeks ago, in writing of market conditions, the main aim was to tell the truth, but as to the general trend of affairs, to be as non-committal as possible. There were so many contingencies that it was a risky thing to be too positive. But the market has taken such a decided turn for the better than there is no longer any certainty about it. The gist of the whole matter is that consumers have more business, and they need more iron in consequence. There is a betterment in all branches of the consuming end of the trade. Mills, foundries and special shops are all doing more, and expect to do more than for months past, and hence the demand for iron has been progressively active. This week transactions have been heavy, but outside of a few round lots of basic and pipe metal there have been no very significant trades, but buying has been heavy all along the lines. It is the total of the orders that have been booked rather than any remarkable single order that makes the current record.

"Prices on both Northern and Southern iron have advanced. On Southern iron \$10 for No. 2 foundry and \$9 for gray forge are now asked and obtained. Northern No. 2 foundry is firm on the basis of \$12 strong, as compared with a weak \$11.50 a few weeks ago.

"Producers are not in as pleasant frame of mind as consumers. There is a great deal of trouble from strikes. In the Birmingham district half the furnaces are out because of the coal-miners' strike, which has continued now without intermission since the first of July. Apparently the operators are slowly gaining ground, but there have been no decisive events as yet. In the Virginia coal fields there is a shortage of labor, which is putting the ovens out of commission right along, so that in the past six weeks the coke output has been seriously, if not alarmingly decreased. In the Connells-ville and adjacent districts there is a shortage of labor and of cars both: in fact, if things keep on, that is, if demand continues as it is at the present time, there promises to be a most serious scarcity of pig-iron and coke before the end of the year."

To Encourage Investments.

Mr. L. L. Gilbert of Montgomery, Ala., secretary of the Alabama Commercial and Industrial Association, has sent to every commercial club in Alabama a copy of the telegram from Mr. Joseph H. Hoadley of New York, president of the International Power Co., regarding his study of South-

ern advantages for manufacturing. Mr. Gilbert suggests that suitable action be taken by the respective clubs.

A \$100,000 Stove Foundry.

The latest important industry to be announced for Chattanooga, Tenn., is a stove foundry. The plant will be built by the Tennessee Stove Works, now being incorporated with capital stock of \$100,000, the amount of \$50,000 having already been subscribed. Four and one-half acres of land have been purchased for the site, and the erection of a molding-room 100x200 feet will be begun at once. An equipment of modern machinery will be installed for a weekly output of 600 stoves, employing 120 men, and operations are expected to begin by January 1. Among the incorporators are Messrs. J. L. Caldwell, G. W. Carey, R. B. Davenport, G. N. Henson, J. L. Foust, George F. Neese and R. L. Westcott. Mr. Caldwell will manage the enterprise and be assisted by Mr. Carey, who has had 15 years' experience in stove design and manufacture.

For a First-Class Road.

The Hook & Ford Contracting Co. of Baltimore, Md., writing to the Manufacturers' Record regarding its contract for the improvement of Park Heights avenue at a cost of \$30,000, says: "We have our complete plant for doing the work. This is the largest contract ever awarded in this State for road-building, and as this class of work is our specialty, we hope it may be the beginning of a new era in the good-roads movement in our State. When this road is completed we will have a continuous drive of six miles from Druid Hill Park gate over one of the best roads in the world. The road will be built of Trappe rock, and there is nothing in the world that will compare with it in road construction."

80-Ton Oil Mill Completed.

An addition to the cottonseed interests of Charlotte, N. C., is noted in the completion during the week of the Elba Manufacturing Co.'s mill at Charlotte. This company was organized last June, and then awarded contract for the plant, which is now ready for operation. The building is a modern structure 50x125 feet, equipped with machinery for a daily capacity of 80 tons of cottonseed. The company's president is Thomas J. Davis; vice-president, C. A. Bland; treasurer, J. R. Van Ness, and secretary, O. B. Robinson. It is capitalized at \$100,000.

Big Fertilizer Plant.

The Ashpoo Fertilizer Co. of Charleston, S. C., has purchased eight acres of land as site for a big fertilizer plant at Macon, Ga., and will immediately arrange to erect the necessary buildings and install the machinery needed. The plant will have an annual capacity of 30,000 tons of fertilizer.

The organization meeting of the supply and machinery dealers of the North, East and West, which was to have been held in Cleveland, Ohio, on the 18th and 19th of October, has been postponed, the new dates not yet having been decided upon. The meeting will be held in Cleveland, and due notice of the time and place will be given. The success of the movement is assured, but those interested are anxious to get matters in as near perfect condition as possible before the meeting.

The Planters' Chemical Co. of Talladega, Ala., has begun operation with a capacity of 25,000 tons of acid phosphate and ammoniated guano annually, and employing from 50 to 100 men. The sulphuric acid used in making fertilizer is made from pyrites mined by the company near Watt Station, on the line of the Eastern Railway of Alabama.

INDIVIDUAL EXHIBITS AT ST. LOUIS.

[Special Correspondence Manufacturers' Record.]

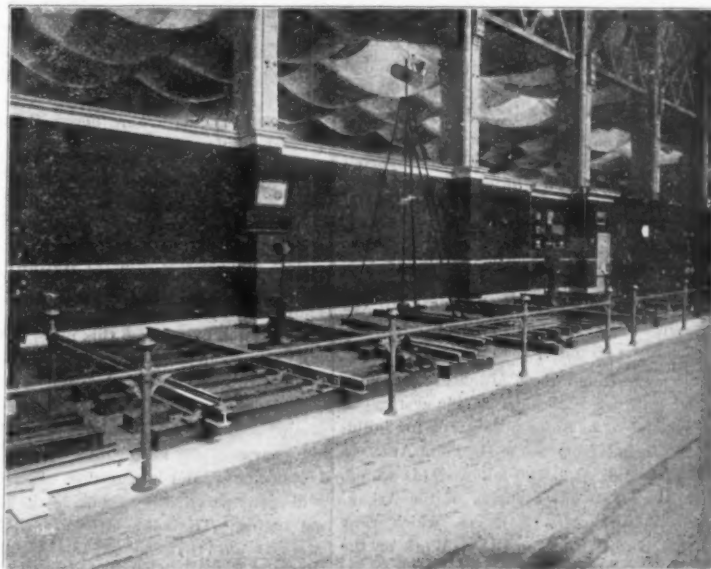
St. Louis, Mo., October 10.

The American Frog & Switch Co. of Hamilton, Ohio, well-known manufacturer of frogs, switches, rail braces, steam and electric track supplies, occupies 1000 square feet of space in the Transportation Building. Its exhibit illustrates the railway track equipments it manufactures for industrial railways, electric railways and steam roads. There is shown a complete turnout of light rail for industrial purposes, such as is being furnished by the company in considerable quantities to mines, furnaces, sugar and cotton plantations throughout the country, and also to countries abroad. The exhibit also illustrates several different designs of switchstands, comprising automatic ground throw stands, plain ground throws, main line switchstands and high target switchstands. Three different designs of split switches are shown, illustrating the company's well-known designs of reinforced split switches with adjustable bars. There are also illustrated the various types of spring frogs, which are standard on a number of lines in various sections of the country. Especial attention is called to

service is the longest the company has record of, and this was not considered sufficient. The slide valve, however, is running on 20 railroads in this country and in two foreign countries, there being over 250 locomotives equipped with this valve at the present time.

Machines for Fine Work.

Interesting not only on its own account, but by comparison with the gigantic engines, lathes, etc., which surround it, is the exhibit of the Sloan & Chace Manufacturing Co., Ltd., of Newark, N. J., whose efforts are confined to the manufacture of "precision" machinery—lathes, etc.—which turn out the smallest pinions used for the works of a watch. The exhibit consists of bench milling machine, automatic gear-cutter, automatic pinion-cutter, machinist's bench lathe, etc., and the machines shown are power-connected, so that on request they are operated to show how the diminutive watch wheels are made. The machines shown represent but a part of the products of the Sloan & Chace Manufacturing Co., whose lines include bench lathes and attachments, milling machines, drill presses, tapping ma-



THE AMERICAN FROG & SWITCH CO.'S EXHIBIT.

the reinforced hinged wing rail frog, which is the American Frog & Switch Co.'s latest patent in this design, and which is receiving the warmest commendations of railroad people who have visited the World's Fair and inspected this exhibit.

Valves in Long Service.

The American Balance Valve Co. of Jersey Shore, Pa., has on exhibit in the Transportation Building and also in Machinery Hall its two new types of main valves for steam engines, locomotives, marine engines, etc., which are specialties of the company. One of the exhibits consists of a set of American semiplug piston valves, which were in continual service from June 11, 1901, to March 31, 1904, on the Buffalo & Susquehanna Railroad. No repairs have been made to the valves during that service of two years and nine months, and they were removed only for the purpose of being forwarded to St. Louis for the exposition. During the period of service mentioned the engine made 91,341 miles, and Mr. C. R. Williams, general master mechanic of the Buffalo & Susquehanna Railroad Co., stated that he saw no reason why the valves should not continue to give the same effective service for another five years. The American Balance Valve Co. also makes a specialty of the slide valve, but no exhibit of those having been in service is made, as a year's

chines, automatic pinion-cutters, automatic gear-cutters and subpress dies and special tools, all for very fine work.

For Mission Work.

A queer little building in the Transportation Building, World's Fair, and a fancifully colored and oddly designed affair it is, too, comprises the only Russian building to be found at the fair. It was erected by the Westinghouse Company, Limited, of St. Petersburg, after designs by a native Russian architect, and was made complete for setting up by peasant builders in a village near Moscow. The style is very primitive, the exterior being that of a forest log cabin. The logs are neatly hewn, however, and notched together so closely that no open joints remain to be plastered, as in American huts. The entire building was shipped to this country in boxes, and no nails were required in putting it together. The material used throughout is white pine from the forests near Moscow, and it is elaborately painted and ornamented in the gayest colors. The interior decorations are thoroughly Russian. Here, and in a Kiosk located at the head of a row of national booths erected by the different Westinghouse companies of America and Europe in Machinery Hall, tea, brewed in curious old samovars, and suchari, a sweet native biscuit, are served to visitors by Russian girls in native costume.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

NEW LINES PROPOSED.

Ten Incorporations and Organizations Reported Within a Week.

The Tennessee, Georgia & South Carolina Railway Co., according to a dispatch from Dalton, Ga., has applied to the court in Whitfield county of that State for a charter to build an electric railroad from Clayton, Ga., to Ducktown and Chattanooga, Tenn. It will eventually extend in South Carolina and be about 200 miles long. It will connect the following towns: Clayton, Hiwassee, Young Harris, Blairsville, Morganton, Mineral Bluff, Varnell, Ringgold, Ga., and Ducktown and Chattanooga. The incorporators are W. B. Frink, J. D. Cameron, E. N. Frink, D. J. Haynes of New York city, J. A. Jones, G. W. McAfee, E. N. Butt, Wm. M. Wilson, J. B. McKenney and Merrell Skinner of Blue Ridge, Ga.

The Nueces Valley, Rio Grande & Mexico Railway is reported chartered to build a line from Carrizo Springs, Texas, to connect with the International & Great Northern Railroad, about 40 miles distant. It is also proposed to have the line finally extend to Eagle Pass, Del Rio, Tilden, Oakville, Beeville and Aransas Pass. N. M. Lee is president, according to a dispatch from Carrizo Springs, and W. A. Squires, vice-president. J. L. Zachery will, it is stated, make the survey. The contract for the first 20 miles is reported let to Ward & Lee, and construction is to begin as soon as the survey is complete.

The Midland Valley Railroad Co. of Fort Smith, Ark., has been granted permission to extend its line from at or near Boles in Scott county, Arkansas, to the south line of Montgomery county, Arkansas, about 55 miles.

The St. Louis, Iron Mountain & Southern Railroad (Missouri Pacific system) is reported to have let a contract for building a line from near Gurdon, Ark., to Greenwood, Ark., 160 miles. This would, it is said, be an extension of the Arkansas Southwestern Railroad, which runs from Gurdon to Pike City. Work on the extension, it is reported, has been going on for some time near Caddo Gap. The line will be known as the Gurdon & Fort Smith Railroad, and the Dalhoff Construction Co. of Little Rock is the contractor. Another report says it is rumored that this line will be part of the Midland Valley.

The Mt. Mena Traction Co. has been organized at Fort Smith, Ark., to build a short electric railway from Rich Hill, on the Kansas City Southern Railroad, to Mt. Mena, to be completed by next summer. The line, it is said, will reach an altitude of 3000 feet. The incorporators are Jas. L. Hale, E. J. Mills, G. H. Little, G. B. Noble, Alfred T. Bissell, W. W. Lowrey, James W. Hale. Alfred Bissell is president; E. J. Mills, vice-president, and Jas. L. Hale, secretary and treasurer.

The Mercer Electric Railway Co. of Princeton, W. Va., has been chartered to build a line from Bluefield to Athens, in Mercer county, about 15 miles. The incorporators are James Scott, W. C. Hedrick, J. E. T. Sentz, G. P. Damewood, T. H. Holt, Princeton, W. Va.

The Rock Lick & Wolf Creek Valley Railroad Co. of Fayetteville, W. Va., has been chartered to build a railroad from the mouth of Rock Lick creek on Arbuckle creek to Wolf Creek valley, and to connect with the Deepwater Railway on Lower Loup creek. The incorporators are J. M. Richards, A. D. Smith, Jr., C. A. Goddard, S. T. Carter, C. W. Oseinton, Fayetteville, W. Va.

The Magnolia Electric Railway & Power Co. is reported organized at Magnolia, Pike county, Mississippi, to build a line connecting Magnolia and Summit via McComb City, Whitestown and Fernwood. The incorporators are J. H. Price, C. V. Ratcliff and L. E. Schilling.

The Liberty City, Glennville & Manassas Railroad has been chartered in Georgia to build a railroad about 30 miles long to connect those points in Liberty and Tattall counties.

The St. Petersburg & Gulf Railroad Co. has been incorporated at St. Petersburg, Fla., to build a railroad from that place via Disston City to a point on the Gulf coast. It will be about eight miles long. The incorporators are F. A. Davis, Gus S. Gandy and W. L. Haddock, all of Philadelphia.

MIDDLESBORO MINERAL.

Belief That the Southern Railway Will Soon Build This Important Line.

[Special Cor. Manufacturers' Record.]

Middlesboro, Ky., October 10.

A meeting of the stockholders of the Middlesboro Mineral Railway in this city last week is causing a revival of interest in the proposed building of a railroad extension from this place to penetrate the immense tracts of coal and timber land along the headwaters of the Cumberland river in Harlan county, Kentucky, and the prospects for the early extension of a line into that region are now regarded as brighter than ever before. Although nothing has as yet been given out by the directors regarding their plans, it is the general opinion that the road will be constructed at an early date, inasmuch as the company holds valuable rights of way and other interests are seeking an entrance into the same region.

The Middlesboro Mineral Railway was projected several years ago, and is in reality backed by the Southern. A survey has been made from this place to Harlan, the county-seat of Harlan, a total distance of 43 miles, and during the past two years all the right of way has been secured. The line as surveyed follows the course of the headwaters of the Cumberland river, and is a gradual rise, which will easily permit the passage of the heaviest trains. The route of the road is so mapped out that no tunneling will be necessary, and the line may be built with comparatively small expense.

During the past few years numbers of Eastern investors have been acquiring coal and timber lands in the region into which the railroad is projected, and have given evidence of the high regard for the deposits of coal by the prices they pay. Among the earliest operators in the coal fields of Harlan and Letcher are Kimberly & Buhl of Pittsburg, Deering Harvester Co. of Chicago, R. G. Gillispie of Pittsburg and a number of New York capitalists, the least price paid being \$10 per acre.

The Leslie and Harlan county coal fields are regarded as a continuation of the great coal fields along the valley of the Big Sandy river, in Eastern Kentucky, and the seams of coal are almost identical in quality. The principal seam is Elkhorn, or No. 3, and ranges in thickness from 72 to 90 inches. It is similar to the famous Elkhorn coking coal of Pike county. Several other seams have been opened up during the past two years, all of workable thickness, and cannel coal 38 inches in thickness, underlain by 40 inches of splint coal, has been revealed. Among the veins which have been investigated are the Pocahontas and Stonega seams, being the same grade of coal operated in the Virginia and West Virginia fields.

One fact that would seem to indicate that this field will at an early date receive connection with a market is that

another big railroad, the Louisville & Nashville, has lately projected a line from Pennington Gap, Va., across into the Harlan county fields. During the past few months this road has made several surveys in that region, that from the Cumberland Valley division at Pennington Gap into Harlan county being 10 miles in length. This shows that the field is regarded as important, and will no doubt stir the Southern to more vigorous measures. Between these two companies the chances for an outlet are good.

With the opening up of the great coal fields of the Big Sandy valley by the Chesapeake & Ohio extension from Whitehouse to the Breaks of the Sandy and the proposed opening up of the continuation of this field by a line from the south, the coal fields along the borders of the States of Kentucky, Virginia and West Virginia will receive thorough development during the next few years. W. S. HUDSON.

"COTTON BELT" REPORT.

St. Louis Southwestern Improving Its Line Facilities and Service.

The thirteenth annual report of the St. Louis Southwestern Railway Co. for the fiscal year ended June 30 last shows gross earnings \$7,649,485, increase as compared with the next preceding fiscal year \$370,910; operating expenses \$5,421,597, increase \$165,433; net earnings \$2,227,887, increase \$205,476. It is stated that the new bridge across the Mississippi river between Gray's Point, Mo., and Thebes, Ill., in which the company has a one-fifth ownership, will probably be ready for trains in January next. This will enable the company to run trains over the Illinois division of the St. Louis, Iron Mountain & Southern Railway into St. Louis, Mo., according to traffic arrangement concluded.

During the year the company has made considerable additions to its equipment, including more than 2000 freight cars, 28 passenger cars of different kinds and five each of baggage and express and mail and express cars. It has also continued the work of putting 75-pound rails in the track, and now has a total of more than 615 miles of such rail.

The company is now building at Illmo, Mo., a 10-track yard with roundhouse and station buildings, and connections will be made with the new bridge between Gray's Point and Thebes. The grading is already completed at this yard, and the rest of the work is going on. The company is also at various points extending its passing tracks and relaying them with 56-pound rail, which has been superseded in the main line by 75-pound rail.

The new construction completed during the year was an extension of the Lufkin branch from Monterey, Texas, to a point one mile east of the Attoyac river, about four miles.

In submitting his report Mr. F. H. Britton, vice-president and general manager, says:

"The freight-traffic prospects for the ensuing year are favorable at the date of this report (September 1). Although the cotton crop of Texas has deteriorated in the past 15 days, owing to weather conditions and the boll-weevil pest, it is not believed that the Texas cotton movement will be less than that of the past season. In Arkansas and Louisiana the cotton prospects are good. The Texas grain crops are assured, and trade conditions generally throughout the Southwest are excellent."

BIG DEAL ANNOUNCED.

Steamboat and Railroad Lines in Maryland Bought by a Syndicate.

A deal involving a total of about \$2,500,000 is announced by which the Weems

Steamboat Co. and the Chester River Steamboat Co., both of Baltimore, have been purchased by a syndicate of New York, Philadelphia and Wilmington (Del.) capitalists, represented by Nicholas P. Bond of Baltimore and Henry P. Scott of Wilmington. The purchasers will, it is said, also take the Queen Anne's Railroad, which is now in the hands of receivers, and which owns several steamers in addition to its railroad line crossing the Maryland and Delaware peninsula from Love Point, Md., to Lewes, Del., about 75 miles. Since the deal the name of Capt. Willard Thomson has appeared as agent for the Weems Line, and as he is manager of the Baltimore, Chesapeake & Atlantic Railroad (a Pennsylvania Railroad organization), it is believed that the Pennsylvania is behind the deal. If that be so, the Pennsylvania will have control of very nearly all the steamboat business on the Chesapeake bay and its tributaries, as well as of railroads on the peninsula.

The Weems Line has 10 steamers and the Chester River Company four. It is said that the three steamers of the Queen Anne's Line will not be bought by the syndicate, as it will have enough boats without them. The Weems Line is said to be the oldest steamboat company in the United States, and probably the oldest in the world, to remain under one proprietorship. It was established in 1817.

LINE TO ZINC MINES.

Construction of a Railroad Along the Buffalo River Suggested.

Mr. A. A. Webber writes from Sylon, Ark., to the Manufacturers' Record that there is an opening for the construction of a railroad from either Buffalo City or Winnerva up the Buffalo river as far as the Jack Pot mines in Searcy county, Arkansas. He says there is no doubt about the future of the northern part of Arkansas as a zinc country, and a few electric or steam roads would materially add to its development. A railroad constructed on the line he suggests would take in all the principal mines along the Buffalo river.

Mr. Webber also sends information that on either side of the Buffalo river from Winnerva to Gilbert, Ark., a distance of 35 or 40 miles, mills of 50 to 100 tons capacity have been erected by 10 mines, and also that within three miles of the river between those points about 100 zinc properties are indicated. It is claimed that the opening of a number of other mines will follow the building of a railroad, and in addition to obtaining tonnage of zinc ore it would also get freight from lumber, stone and marble. Mr. Webber further says that at several places along the Buffalo river sufficient water-power can be found to generate enough electricity to supply the requirements of the railway and also to supply mills.

Kansas, Okmulgee & Gulf.

Mr. Fred H. Smith, president of the Kansas, Okmulgee & Gulf Railroad Co., recently chartered to build a line 500 miles long from Kansas City, Mo., to the Red river, in the Choctaw Nation, writes from Okmulgee, I. T., to the Manufacturers' Record as follows:

"Our line of road is not yet definitely located through the Indian Territory, so far as the towns are concerned, aside from this city. We have a guaranteed cash bonus from this city of \$30,000. We expect to cross the Frisco and the Missouri Pacific at or near Claremore, I. T., and thence in nearly a northerly direction to the Kansas line; south from here we will cross the Choctaw, Oklahoma & Gulf and the Missouri, Kansas & Texas railroads at or near South McAlester, I. T.

"For the greater part of the distance this line will pass through a very fine

agricultural country, and will, in addition thereto, reach the richest coal and oil and gas fields now known to exist in the Territory. The line will open up quite a scope of heretofore undeveloped farming country, as well as some new coal fields. We are now engaged in making a preliminary survey, which will definitely locate the line through the Territory."

Day and Night Express Trains.

The Chicago & Eastern Illinois Railroad Co. of the Frisco system announces the establishment of a day express service between Chicago and St. Louis. Trains will leave Chicago at 9.50 A. M. and reach St. Louis at 6.45 P. M. They will leave St. Louis at 9.30 A. M. and arrive at Chicago at 6.33 P. M. A night express service was established several months ago. The equipment is new and complete throughout. Bryan Snyder is passenger traffic manager, and W. H. Richardson, general passenger agent, both at St. Louis.

Logging Road.

Mr. E. A. Buell, president of the Norfolk County Timber Corporation, writes from Norfolk, Va., to the Manufacturers' Record: "This company is now grading for a three-foot logging road that will be built to water from its timber holdings on and near the Northwest river, this county. The road will run from the Southern branch of the Elizabeth river (this harbor) to the Northwest river. The company will soon be in the market for 10 miles of 35 or 40-pound rail and other supplies and equipment."

Proposed Cut-Off.

Mr. E. B. Cushing, general superintendent of Morgan's Louisiana & Texas Railroad & Steamship Co., writes the Manufacturers' Record that the survey for the change in the main line of the Galveston, Harrisburg & San Antonio Railway between Etholan and Fabens, in El Paso county, Texas, is about 42 miles, and will shorten the line about nine miles. So far as he knows, there is no immediate intention of constructing this line.

Railroad Notes.

The annual report of the Louisville & Nashville Railroad says that the Knoxville, LaFollette & Jellico Railroad will probably be opened about January 1.

A dispatch from Enid, O. T., reports that John Overholt, general superintendent of the Denver, Enid & Gulf Railway, announces that the road has been sold to the Missouri, Kansas & Texas Railway.

The Louisville & Nashville Railroad has placed in operation the first of its new shops at Louisville. This is the freight repair shop. There are a number of other buildings of steel-frame construction, and all are expected to be in use about the first of next year.

It is reported that the Richmond, Fredericksburg & Potomac Railroad will probably have all of its double track completed from Richmond to Quantico, Va., 81 miles, by January 1. The Washington & Southern, from Quantico north to Washington, may have all its double-tracking done by next February or March.

More than 20 firms of South Carolina, Georgia, Alabama, Florida, Mississippi and Arkansas are represented in the newly organized Yellow Pine Sash, Door and Manufacturing Association, of which David Woodward of Atlanta is president.

Josef Schvarcz & Co. of Budapest write to the Manufacturers' Record that they desire to get in touch with American exporters of cheap rosin and of cotton waste and twist.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

A \$200,000 FINISHING PLANT.

Philadelphians to Establish One at Charlotte.

Messrs. Samuel Lea's Sons, S. John Lea, proprietor, 1148 American street, Philadelphia, Pa., will establish and operate a finishing plant at Charlotte, N. C. Mr. Lea was in Charlotte during the past week seeking a suitable site for the plant. He is reported as stating that it is the intention to remove the Philadelphia equipment to Charlotte, there erecting modern buildings and providing additional equipment, the total investment to amount to about \$200,000. Bleaching, dyeing, napping, printing and other processes of finishing textiles for the market will be provided for. About 170 persons will be employed.

A \$500,000 Cotton Mill.

Some weeks ago the Manufacturers' Record announced that William Coleman, president of the Glenn-Lowry Manufacturing Co. of Whitmire, S. C., had decided to build a 25,000-spindle cotton factory at Fayetteville, N. C. Further details regarding the enterprise have been obtained this week. The plant will have an equipment of 800 28 looms, besides the spindles noted, for the manufacture of standard print cloths, and active building will begin next spring. A tract of land comprising about 500 acres has been purchased for the site. W. D. McNeill, now manager of the Aragon Mills of Aragon, Ga., will be in charge of constructing the new mill, and is to be superintendent of the plant when it is completed. The investment will be about \$500,000. Other particulars will develop later.

A \$150,000 Damask Mill.

In August the Manufacturers' Record referred to the incorporation and organization of the Elk Mountain Cotton Mill Co. of Asheville, N. C. It was stated that the company intended to install machinery for the manufacture of damask and similar goods. The company has purchased the real estate and buildings of the Wm. Whittam Textile Co., and is utilizing them for the establishment of its new plant. Contract has been awarded for the equipment of machinery, mainly the 100 wide looms for weaving damask. J. A. Burroughs is president; R. S. Howland, vice-president; W. B. Northrup, treasurer, and D. G. Devenish, secretary and general manager. The paid-in capital is \$150,000.

The New Muscogee Mill.

It is announced that mill No. 4 of the Muscogee Manufacturing Co. at Columbus, Ga., is about to be put in operation. This mill is located on the Chattahoochee river on solid concrete foundation, and in connection with the company's former plant is 175x105 feet, five stories high. The total equipment will consist of about 15,000 spindles, with all the preparation. About 5000 spindles will be started now, and the balance will be installed during the year. This plant is supplementary and additional to the present Muscogee plant of 16,000 spindles. The total outfit contemplates the expenditure of about \$200,000.

The Cotton Movement.

In his report for October 7 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 37 days of the present season was 1,891,850 bales, an increase over the same period last year of 755,107 bales; exports were 976,574 bales, an increase of 511,455; takings by Northern spinners 165,510 bales, an increase of 8718; by Southern spinners 211,649 bales, an increase of 37,846.

Bookbinding Cloth Machinery Wanted.

The Manufacturers' Record has received a letter from Bhupati Nath Bhowe of 77 Sitaram Ghose's street, Calcutta, India, who states that he wants information regarding the manufacture of bookbinding cloth, together with catalogues and prices on the machinery required.

Textile Notes.

It is reported that the Rhodhiss Manufacturing Co. of Rhodhiss, N. C., contemplates adding 20,000 spindles during 1905.

R. L. Caviness has purchased, and, it is said, will operate the mill of the Enterprise Manufacturing Co. at Coleridge, N. C. This mill has 4624 spindles, etc.

Walter M. Jackson of Augusta, Ga., proposes organizing stock company for the purpose of building a cotton factory in North Augusta, S. C., opposite Augusta.

Messrs. J. R. Kidd & Sons have leased and will operate the Powell River Woolen Mill at Big Stone Gap, Va. They are now overhauling the plant and making some improvements.

The Darlington (S. C.) Manufacturing Co. has added 12,000 spindles and increased its looms to 1384, the new machinery occupying vacant space in the company's present buildings.

It is proposed to organize a \$100,000 stock company to build a cotton mill at Greensboro, N. C., and site for the plant has been purchased. Names of interested parties have not been announced.

Jesse Thompson, Jr., of Swainsboro, Ga., proposes organizing a company with capital stock of \$100,000 to build a cotton factory. He contemplates utilizing buildings which he owns and a developed water supply.

The Whitmire Manufacturing Co. of Whitmire, S. C., reported incorporated in July, has organized with W. H. Razor, president; J. V. Thomason, vice-president, and William Scott, secretary-treasurer. It will establish a handkerchief factory. Capital stock is \$10,000.

The Southern Colored Goods Association, representing 150,000 spindles and 6000 looms, has been organized with Mr. F. C. Moring of Raleigh, N. C., president; J. W. Fries of Winston-Salem, vice-president, and B. F. Robertson of Haw River, N. C., secretary and treasurer.

It is expected that arrangements will be completed in the near future for the establishment of the cotton-rope and twine mill previously reported as contemplated for erection at Huntsville, Ala., by New York capitalists. W. I. Wellman of Huntsville is negotiating for the enterprise.

The Marion (S. C.) Manufacturing Co., reported incorporated in August last, has elected the following directors: Messrs. William Stackhouse, W. J. Montgomery, R. J. Blackwell, W. S. Foxworth, J. Clement Davis, H. C. Graham and J. C. Mace. Mr. Stackhouse has been elected president, and Mr. Montgomery, vice-president. It is proposed to build a cotton factory, but final details as to the plant have not been announced. Capital stock is \$100,000.

QUOTATIONS OF COTTON YARNS.

By Paulson, Linkroom & Co., New York, Philadelphia and Chicago. October 11.

No. 10s-1 and 12s-1 warps.....	16½ @ 17
No. 14s-1 warps.....	17 @ 17½
No. 16s-1 warps.....	17½ @ 18
No. 20s-1 warps.....	18 @ 18½
No. 22s-1 warps.....	19 @ 19½
No. 26s-1 warps.....	19½ @ 20
No. 6s to 10s yarn.....	16 @ 16½
No. 12s-1.....	16½ @ 17
No. 14s-1.....	17 @ 17½
No. 16s-1.....	17½ @ 18
No. 20s-1.....	18 @ 18½
No. 22s-1.....	19 @ 19½
No. 26s-1.....	19½ @ 20
No. 8s-2 ply soft yarn.....	17 @ 17½
No. 10s-2 ply soft yarn.....	17½ @ 18
No. 8s-2 ply hard.....	16½ @ 17
No. 10s-2 ply hard.....	17 @ 17½
No. 12s-2 ply hard.....	17½ @ 18
No. 14s-2 ply.....	18 @ 18½
No. 16s-2 ply.....	18½ @ 19
No. 20s-2 ply.....	19 @ 19½
No. 22s-2 ply.....	19½ @ 20
No. 26s-2 ply.....	20 @ 20½
No. 30s-2 ply yarn.....	21 @ 21½
No. 40s-2 ply.....	25 @ 26
No. 8s-3, 4 and 5 ply.....	16½ @ 17
No. 20s-2 ply chain warps.....	19 @ 19½
No. 24s-2 ply chain warps.....	20½ @ 21
No. 26s-2 ply chain warps.....	21 @ 21½
No. 30s-2 ply chain warps.....	21½ @ 22
No. 16s-3 ply hard twist.....	17 @ 17½
No. 20s-3 ply hard twist.....	19 @ 19½
No. 26s-3 ply hard twist.....	21 @ 21½

Prices nominal.

Would Push American Wares.

Mr. Jens Thorne, No. 3 Eliesnebergveien, Christiania, Norway, would like to correspond with Americans interested in the export of such Southern products as cotton oil, fertilizer, rice, syrup, pig-iron, etc. To the Manufacturers' Record Mr. Thorne writes:

"During three months' stay in America I received agencies for cotton, cottonseed oil, pig-iron, rails, plates for shipbuilding, wire, lard, grain, fruit, different kinds of machinery, etc., which I shall try to introduce here. It is easier to introduce patented articles, such as gas lamps, fire-escapes, etc., than large machinery, which we are manufacturing ourselves. The worst thing is that the Germans have taken almost our whole market. They are selling cheap and are sending their travelers direct to all their customers. Americans have commonly only an office in Paris or London, and do not take up the competition in our market. They should have their agent on the spot, who can tell what kind of goods we want, who must be furnished with samples from America, and who can demonstrate, advertise and sell the goods direct to the customers. If Americans would get our market they must compete with the Germans, who always give credit and offer the goods mostly c. i. f. When the Americans are getting payment against bill of lading they ought not to demand better conditions. You can get freight stipulated much cheaper in America. For that reason you must offer c. i. f., or at any rate pay the freight and put it to the invoice. To import machinery is very difficult, especially at present, as the business is quite down and the times are very bad for purchasing new machinery. In the machinery line, too, the older firms have almost all their connections in Germany and England, but I am looking out for young, aggressive engineer firms who want to introduce new things, and who are not waiting for people to call on them, as is the custom here, but are calling on the people and recommending their goods."

Big Texas Lumber Mill.

The lumber trade of Beaumont, Texas, has been augmented during the week by the opening of offices there by the McShane Lumber Co., which has just completed a big manufacturing plant at Dearborn, near Beaumont, on the Santa Fe Railway. Operations are about to begin. The mills have a daily capacity of 125,000 feet of lumber, and dry-kilns with a capacity of 80,000 feet have been provided. The company owns 18,000 acres of timber land, which will be developed, and in order to facilitate this a tramroad eight miles long has been built. John A. McShane is president.

MECHANICAL

Coltrin Cement Mixers and Molds.

Cement is largely taking the place of stone, brick and lumber in building and construction work. The demand is steadily on the increase, and machinery is being used for forming cement into different shapes, styles and sizes with a minimum of expense in material, time and labor.



R. B. COLTRIN CEMENT MIXER.

Accompanying illustrations present views of a cement mixer and a mold recently patented, which is now meeting with general commendation for simplicity, practicability and rapid work. These machines are the R. B. Coltrin Cement Mixer and the R. B. Coltrin Cement Mold.

The construction of the mold is perfect and substantial, and there is nothing to get out of order. It is easily handled, all

ingenious device which holds all the parts rigidly in place and does away with any chance movement. One hundred blocks per day is said to be the average day's work with two men; with two molds, three men to put up 200 blocks per day as easily as two men can make 100.

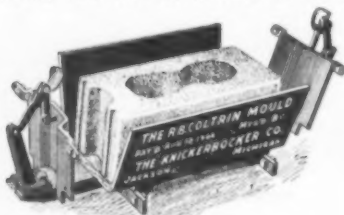
The R. B. Coltrin Sill Mold, for making door and window caps and sills, water tables, etc., is so constructed that it can be easily and quickly adjusted for any



R. B. COLTRIN BLOCK MOLD.

parts are interchangeable, and the method of manipulation for forming the many different styles of solid, hollow, veneer and tie blocks possible with the machine is extremely simple.

No. 8 mold will make a block 8 inches wide, 8 inches high and 16 inches long, or the equivalent of 15 bricks; No. 10, a block 10 inches wide, 8 inches high and 20 inches long, or the equivalent of 20 bricks, and No. 12, a block 12 inches



R. B. COLTRIN CEMENT MOLD.

wide, 8 inches high and 24 inches long, or the equivalent of 30 bricks. The No. 10 is the size taken by most users. Accompanying illustrations show the block mold closed for filling and open for the removal of the cement block, which can be easily lifted on the mold board by carrier hooks furnished for the purpose. When the mold is closed for filling it is at the same time securely locked by a very simple and

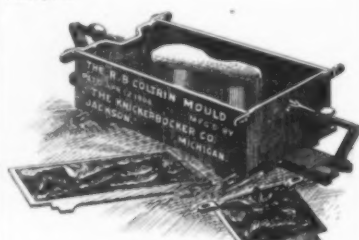
length, width, height or angle desired, and is especially desirable for use in construction of sewers, culverts, bridges, porch work, slabs, curbing and coping.

The R. B. Coltrin Cement Mixer is very simple in principle, and the power can be by hand or otherwise, as every machine is so equipped, but is intended especially for the former.

The mixer stands six feet long, three

feet wide and four feet high and weighs about 600 pounds.

The mixing is done in a steel shell the shape of half a circular cone, by revolving blades one and one-eighth inches wide and one-fourth of an inch thick, extending from the head, where the material is put into machine, on a spiral, to the foot of the machine, where the mixture is discharged.



R. B. COLTRIN CEMENT MOLD.

In the ordinary manner of using the material is prepared by putting the gravel or sand into a square frame usually about three feet by three feet and one foot high, then spreading the desired quantity of cement evenly on the gravel or sand. Remove the frame and shovel the material so prepared into the front end of the mixer, with a man operating the hand wheel. There is

a water tank with water gate on top of the machine within easy reach of the man turning the hand wheel, and the amount of water can be regulated as desired.

The mixture travels the length of the shell, four feet seven inches, and is ready for use as soon as it leaves the machine. The mixing is continuous while the machine is in operation.

The frame is built of maple, reinforced with iron corner brackets. The shafting is cold rolled steel. The bearings of the shafting are roller-bearing boxes, thereby reducing the friction and power required to the minimum.

The mixer is mounted on three wheels, one at the front end and two at the rear, with three-inch tread, and can be easily handled by one man.

Further details regarding the superior features of these machines can be obtained by addressing their manufacturer, the Knickerbocker Company of Jackson, Mich.

New Air-Hose Coupling.

A new coupling known as "Giv't-a-Twist" is being brought to the attention

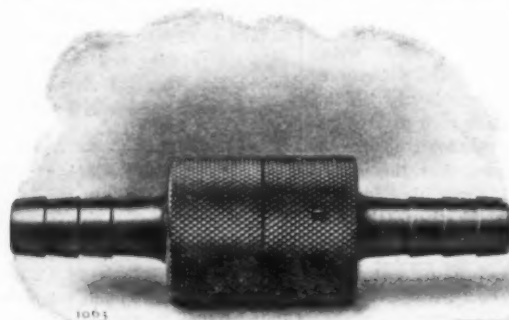


FIG. 1.—A NEW AIR-HOSE COUPLING.

of those who are interested in such devices.

It is a very simple and unique affair designed to meet the long-felt want of a strong and quick-acting hose coupling for use in connection with pneumatic tools.

No wrench or spanner is required to either couple or uncouple the parts. To make a coupling it is only necessary to push the halves together by hand and slightly twist the locking rings in opposite directions. To uncouple the operation is reversed.

Both halves of the coupling being identically the same, the usual necessity of mating the ends is obviated.

There are no projections to catch or break off by the hose being dropped from

A New Boom Swinging Gear.

The three different types of Boom Swinging Gear for derrick engines put on the market by the Lidgerwood Manufacturing Co. each demonstrated their superiority over the one which preceded it. In the No. 4 swinging gear herewith illustrated the company has devised another, and what will unquestionably prove one of the most perfected and popular equipments of the kind yet invented.

It is employed for swinging the boom of any ordinary derrick while simultaneously the boom is being raised and the load hoisted.

This new swinging gear consists of a drum shaft with two gear-wheels and two drums and a friction shaft and two frictions and pinions mounted on side stands tied together by two flat steel braces secured to the bottom of the side stands and countersunk in them, making an independent apparatus which is mounted on an extension of the engine skids and fastened to the front ends of the engine bed-plates. If desired the engine bed-plate

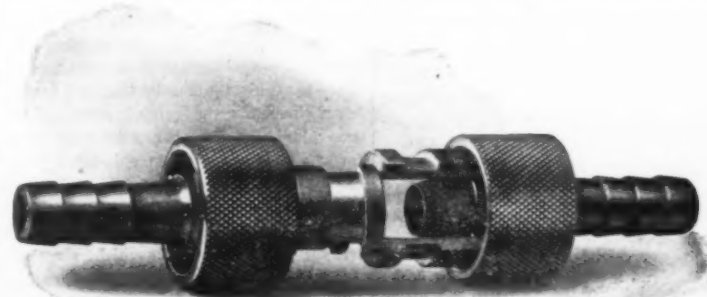


FIG. 2.—AIR-HOSE COUPLING READY FOR CONNECTING.

place to place. The rubber sleeve is entirely encased when the coupling is made, and will withstand any working pressure without leakage. The parts are made of brass, extra heavy to stand rough usage, and are machined throughout. This coupling is not to be compared with cheap, light cast couplings. It is manufactured in all standard sizes for connection, hose to hose, hose to pipe or pipe to pipe with male or female shanks, by the Pneumatic Tool Department of the Ingersoll-Sergeant Drill Co., 26 Cortlandt street, New York city.

gear of the drumshaft, turning the drums in the other direction. The drums are spirally grooved and the ropes wind over on one drum and under on the other.

Thus, when the female friction is moved into contact with one flange the rope is wound up on one drum and unwound on the other drum, and when the other friction is in contact the same thing occurs, but in a reverse direction. The ropes being attached to the bull-wheel of the derrick, it is thus swung in either direction.

The frictions are applied by means of

nuts traveling on composition sleeves having screw threads, which are mounted on the friction shaft and attached by suitable connections to an auxiliary shaft carrying the vertical operating lever. When this lever is in a central (or vertical) position neither friction is engaged, but when it is moved forward it causes one nut to travel on its screw and pushes one friction cone into engagement, and at the

to take up the slack due to the stretching of the rope, and then the collar moved back into place and secured.

The drums being outside the bearings, the ropes leading to the bull-wheel are not in the way of hoisting and boom lines.

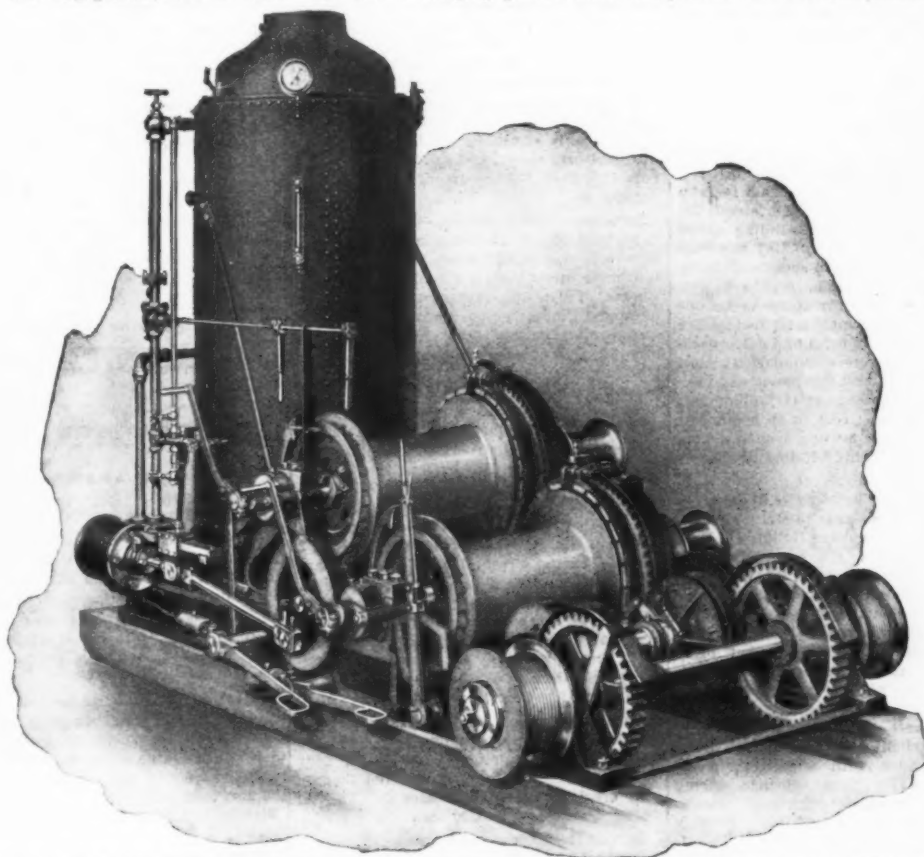
The whole mechanism is positive, strong and well made in every detail and adapted for the most severe service.

The No. 4 swinging gear is made on

chinery Hall, where it is attracting considerable attention. The company's offices are at 95 Liberty street, New York.

Steele & Sons' Brick Machinery.

Brick manufacturers who are on the lookout for information regarding new machines introduced to facilitate the operation of their plants and improve the product will find their attention attracted



LIDGERWOOD STANDARD DOUBLE FRICTION DRUM ENGINE AND BOILER EQUIPPED WITH No. 4 BOOM SWINGING GEAR.

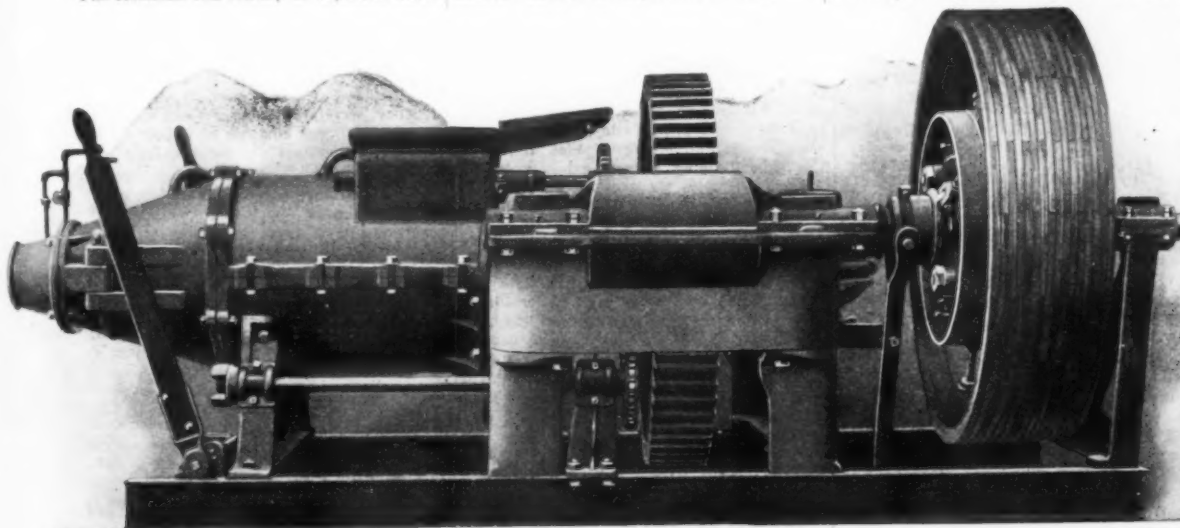
same time the other nut releases the other friction cone. When the lever is moved back the reverse takes place. One lever therefore controls the swinging of the boom in a manner that is simple and effective.

The friction cones are of a special patented type and of great holding power. The frictions can readily be replaced when

the duplicate-part system, and all parts are easy to get at. It occupies a small amount of space, does not add much to the weight of the engine, can be operated easily and quickly.

The apparatus can be placed upon any of the Lidgerwood standard double-drum hoisting engines either with or without boiler, which is an important feature.

by the accompanying illustration. It represents the No. 4 brick machine of Messrs. J. C. Steele & Sons of Statesville, N. C., the well-known builders of "New South" Brick Machinery. The machine shown is now built on steel foundations, with self-contained outer bearing for pulley shaft. It has a capacity of from 35,000 to 60,000 bricks per day, depending on the kind of



STEELE & SONS' No. 4 BRICK MACHINE.

worn without impairing the main parts of the apparatus.

One of the swinging drums is keyed fast to the shaft and the other is loose on same, but prevented from turning by means of a collar keyed to the shaft on which are lugs or projections which fit into corresponding recesses in the drum. When the collar is loosened and moved back the drum may be revolved far enough

The boom swinging gear is one of the most valuable improvements that has ever been placed upon a hoisting engine, as it not only largely increases the capacity of a derrick, but saves the expense of swinging the boom by hand, a laborious, slow and expensive method of doing the work. The Lidgerwood Manufacturing Co. is showing this new swinging gear in its exhibit at the St. Louis Exposition in Ma-

clay being worked. It is furnished with either end or side cut dies. Many of these machines are now in use. Messrs. Steele & Sons have also just completed a No. 5 machine, large auger machine with a capacity of 50,000 to 100,000 bricks per day.

The Diamond Expansion Shield.

The Diamond Expansion Shield shown herewith will be of interest to telephone

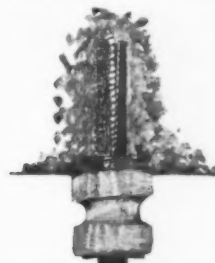
and telegraph companies, electric-light and power companies, miners, railroad companies and others having occasion to fasten trolley and feed wires to brick or stone buildings, the roof or walls of mines or tunnels, and to attaching electric wires to brick, stone, concrete or other masonry. If desired, a pin with standard insulator threads can be cast on the bolt, making it unnecessary to use wooden pins, or the bolt can be made for inserting into the



DIAMOND EXPANSION SHIELD.

wooden pin. This shield gives satisfactory results and can be used to advantage in place of wooden plugs, sulphur, lead, wedge bolts, etc. It is made of metal, threaded on the inside to receive the screw, thicker at the outer end to expand as the screw is run in, and a roughened outer surface to grip the sides of the hole.

When properly set it will not work loose and cannot be pulled out except by actually breaking the material from around



DIAMOND EXPANSION SHIELD.

it, but at the same time may be removed by simply unscrewing the bolt.

The operation of the Diamond Expansion Shield is very simple. A hole is drilled, the shield inserted and the screw run in.

The shield insures a positive hold in any solid material, and the greater the strain on the bolt the more the shield grips the sides of the hole. It is made in sizes from one-eighth-inch to two-inch diameter and is sold by the New Jersey Foundry & Machine Co. of 9 Murray street, New York.

New Steam Turpentine Process.

A new steam process for extracting spirits turpentine and other products from pine wood has been originated by A. J. McArthur, until recently of Gainesville, Fla., but now of Barnard and 34th streets, Savannah, Ga. Mr. McArthur is now negotiating to establish a large pine-wood distillation plant in Savannah, and proposes organizing a company with capital stock of \$200,000 to build and operate it. It is the intention to locate a number of small plants throughout the pine section where the crude spirits will be made, and they will be shipped to Savannah to be refined in a plant to be built there.

Three companies at Galveston, Texas, are doing a large business in the export of white-oak staves to European countries. At the present time there are about 700,000 staves in the yards at Galveston.

The Panama Canal Commission received 67 bids for furnishing 2,700,000 feet of lumber, ties and piling to be used in the construction of the canal.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY.

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY.

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

BALTIMORE BUILDING NOTES.

Business Buildings.

Baltimore—Dwelling.—W. B. McCordell, 511 East 22d street, will erect for himself, after plans and specifications by John R. Forsythe, architect, 2333 Linden avenue, a three-story addition to dwelling at St. Paul and 21st streets, to cost about \$800.

Baltimore—Business Building.—B. F. Bennett, builder, 123 South Howard street, has applied for permit to repair building and add an additional story at 7 North Liberty street for Mrs. S. M. Williams, to cost about \$3500.

Baltimore—Hotel.—James L. Kernan, office at the Maryland Theater, Franklin street, between Howard and Eutaw streets, has secured permit for the erection, at a cost of about \$4000, of an additional story to his hotel building, now under construction, and adjoining the Maryland Theater. With the additional story the structure will be eight stories high. It is 86x96 feet, and the construction is of steel concrete.

Baltimore—Warehouses.—Stewart Darrell, 414 St. Paul street, as agent for the owners, has awarded contract to Henry S. Rippel, builder, 7 Clay street, for the construction of two warehouses to be located at 45 and 47 South Gay street, after plans and specifications by Hoyt & Mackintosh, architects, 11 East Pleasant street. Structures to be four stories high with basement, 49.6x81 feet; brick with granite base and artificial and sandstone trimmings; concrete foundation; steel beams; cast-iron columns; slag roofing; tile coping; galvanized-iron skylights; vault lights; fine shutters; electric wiring and fixtures; sanitary plumbing; steam-heating system; two electric elevators. These buildings previously mentioned.

Baltimore—Store Buildings.—S. E. D. Stewart has commissioned Jacob F. Gerwig, architect, 16 Clay street, to prepare plans and specifications for two store buildings to be erected under one roof at 404 and 406 East Baltimore street. Structure to be three stories high with basement, 34x110 feet; brick

with stone trimmings; concrete foundation; steel beams; tin roofing; galvanized-iron cornice; electric wiring and fixtures; sanitary plumbing; steam-heating system.

Baltimore—Church.—The date for submitting the estimates on construction for St. Peter's Evangelical Lutheran Church has been extended to noon of October 10. Full details concerning this building, plans and specifications, which were prepared by Tormey & Leach, architects, 325 St. Paul street, were reported last week.

Baltimore—Church.—The Church of Messiah, Rev. Peregrine Wroth, rector, 215 East Preston street, has awarded contract to John Cowan, builder, 106 West Madison street, for the construction of church building to be located at southwest corner of Gay and Fayette streets, after plans and specifications by Charles E. Cassell & Son, architects, 411 North Charles street. Structure to be one story high with basement, 85x142 feet; brick with white glazed terra-cotta and galvanized-iron trimmings; concrete foundation; steel beams and girders; cast-iron columns; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost to be about \$50,000. Pews, organ and heating system not included in contract. This building previously mentioned.

Baltimore—Store Building.—George W. Davis has awarded contract to McIver & Piel, builders, Builders' Exchange Building, 2 East Lexington street, for the construction of store building to be located at 105 West Baltimore street, after plans and specifications by Ellicott & Emmart, architects, 323 North Charles street. Structure to be four stories high with basement, 21x70.2 feet; buff brick with granite base and terra-cotta and galvanized-iron trimmings; concrete foundation; steel beams; slag roofing; granolithic pavement; vault lights; galvanized-iron cornice and skylight; galvanized-iron frames and sashes glazed with wireglass; metal ceilings; prismatic glass; electric wiring and fixtures; sanitary plumbing; steam-heating system; electric elevator. Heating system not included in contract.

Baltimore—Store Building.—Tentative plans and specifications have been made by Hoyt & Mackintosh, architects, 11 East Pleasant street, for store building for Charles J. Bonaparte, 216 St. Paul street, to be located at 215 East Baltimore street. Structure to be three stories high with basement; brick with terra-cotta and galvanized iron trimmings; concrete foundation; steel beams; tin or slag roofing; electric wiring and fixtures; sanitary plumbing; steam-heating system. Plans will be distributed to builders for estimates on construction this week.

Baltimore—Store Buildings.—Preliminary plans and specifications are being prepared by Ellicott & Emmart, architects, 323 North Charles street, for five-story store building to be located at 7 and 9 North Charles street for George W. Davis.

Baltimore—Dwelling.—Mrs. Henry Barton Jacobs, 11 West Mount Vernon Place, has commissioned John R. Pope, architect, 1133 Broadway, New York, to prepare plans and specifications for extensive improvements to be made to her dwelling. The alterations will cost about \$50,000.

Baltimore—Warehouse.—E. E. Hunting, 213 Courtland street, has awarded contract to J. H. Walsh & Bro., builders, 406 South Charles street, for the construction of warehouse to be located at northeast corner of Charles and Lombard streets, after plans and specifications by Edward L. Walsh, architect, 406 South Charles street. Structure to be four stories high with basement; brick with stone trimmings; concrete foundations; steel beams; cast-iron columns; galvanized-iron cornice and skylight; electric wiring and fixtures; sanitary plumbing; steam-heating system; power elevator.

Baltimore—Warehouse.—Further details have been obtained concerning warehouse for Edward Markell, 304 East Lexington street, to be erected at 101, 103, 105 and 107 South Charles street, after plans and specifications by William J. Beardsley, architect, 28 West Lexington street. Structure to be six stories high with basement, 62x90 feet; brick with granite base and terra-cotta and galvanized iron trimmings; concrete foundation; steel beams; cast-iron columns; slag roofing; galvanized-iron cornice and skylight; granolithic pavement; vault lights; electric wiring and fixtures; sanitary plumbing; steam-heating system; electric elevator. George Bunnecke & Sons, 305 St. Paul street; Cramp & Co., 407 St. Paul street; J. W.

Lyons, 560 Laurens street; Henry S. Rippel, 7 Clay street; John T. Buckley, 916 Bolton street, and William Steele & Son, 17 West Saratoga street, have received plans which are to be returned October 18 and then distributed to Henderson & Co., Ltd., 218 West Fayette street; C. S. M. Williamson, 20 East Lexington street; H. H. Brown, 109 Clay street; Louis E. Brown, 325 North Stricker street; Evans & Marshall, 411 St. Paul street; John A. Sheridan Company, 321 North Holliday street; Kendrick & Roberts, Inc., 216 North Liberty street; Frank B. Gilbreth, 211 North Liberty street, and Frederick Decker & Son, 1209 East Biddle street; bids to be in October 26.

Baltimore—Store Buildings.—Further details have been obtained concerning store buildings to be erected at 107, 109, 111 and 113 East Baltimore street for the Carroll estate, Continental Trust Co., southeast corner Baltimore and Calvert street, trustee, after plans and specifications by Beecher, Fritz & Gregg, architects, southeast corner Cathedral and Hamilton streets. Structure to be four stories high with basement, 61.2x68.3 feet; brick with terra-cotta and Indiana limestone trimmings; concrete foundation; steel-frame fireproof construction; slag roofing; electric wiring and fixtures; sanitary plumbing; steam-heating system; power elevator. Henry Smith & Sons Co., 116 South Regester street; Morrow Bros., 212 Clay street; Burnham & Wells, Builders' Exchange Building, 2 East Lexington street; John Waters, 23 East Centre street; Thompson-Starrett Company, 606 North Charles street; Murphy Construction Co., 202 West Fayette street, and John A. Sheridan Company, 321 North Holliday street, have been selected to estimate on the construction. Plans will be distributed to above bidders on October 13.

Baltimore—Office Building.—Wm. G. Speed, 114 South Eutaw street, has purchased the property located on Courtland street, near Lexington street, and it is reported that he will erect an eight-story office building on the site, which is 65.6x100 feet.

Baltimore—Storage Warehouse.—William S. Thomas, 506 Fidelity Building, Lexington and Charles streets, has purchased the property located at southeast corner Holliday and Centre streets, and will probably erect in the future a storage warehouse on the site, which is 200x270 feet.

Baltimore—Store Building.—J. Appleton Wilson, architect, 303 Courtland street, will erect store building to be located at north-west corner Centre Market Space and Water street, after his own plans and specifications. Structure to be three stories high with basement, 68x59.9 feet; brick with stone trimmings; concrete foundation; steel beams; tin roofing; galvanized-iron cornice; gas fixtures; sanitary plumbing.

Baltimore—Church.—Revised plans and specifications have been sent out for building for St. Peter's Evangelical Lutheran Church, to be located on North avenue, near Hope street, by Tormey & Leach, architects, 325 St. Paul street. J. H. Farley, 17 North Frederick street, and Melver & Piel, Builders' Exchange Building, 2 East Lexington street, are estimating on the construction; bids to be in October 14. This building previously mentioned.

Manufacturing Buildings and Other Enterprises.

Baltimore—Electric Light and Power Plant. The Baltimore Electric Power Co. has been incorporated, with an authorized capital stock of \$2,500,000, by John T. Stone, president of the Maryland Casualty Co.; David E. Evans, president of the Maryland Telephone & Telegraph Co.; Henry W. Webb, vice-president and general manager of the Maryland Telephone & Telegraph Co.; Robert F. Bonnal, treasurer of the Maryland Telephone & Telegraph Co., and Wm. P. Spring, auditor of the Maryland Telephone & Telegraph Co. This company has been incorporated for the purpose of constructing and operating the light and power plant granted under franchise by the city to the Maryland Telephone & Telegraph Co.

Baltimore—Paper Mill.—W. M. Krager, Builders' Exchange Building, 2 East Lexington street, is negotiating with a paper-manufacturing company of Atlanta, Ga., which is desirous of locating its plant in Baltimore.

Baltimore—Vitrified-clay Plant.—The Baltimore Vitrified Clay Co., Builders' Exchange Building, 2 East Lexington street, has awarded contract to the Woodruff-McLaughlin Company, constructing engineers and architects, 100 East Lexington street, for the construc-

tion of heat dryer to be located at its plant at Westport. The dryer consists of 10 tunnels and is 38x154 feet, with a fanhouse 20x34 feet located in one end. The company is also contemplating the erection of eight kilns and a dock 30x250 feet.

Baltimore—Boxboard Factory.—The Consumers' Boxboard & Paper Co., which was recently reported in this column as having been incorporated, will invest \$175,000 in the construction of a 60-ton capacity plant and equipping it with necessary machinery for the manufacture of boxboards, cardboard and paper from the raw material. Elmer E. Weaver, engineer in charge, York Haven, Pa., wants prices on paper and pulp machinery, engines, boilers and dynamos. The company was promoted by Henry Y. Brady, 327 St. Paul street, general counsel of the company, and Frank B. Brady, 327 St. Paul street, fiscal agent.

Subbids Wanted.

Mention of contractors wanting subbids on construction work and material will be found, when published, in the "Machinery Wanted" column on another page under the heading of "Building Equipment and Supplies."

ALABAMA.

Anniston—Cotton Gin.—Dr. W. J. Warren, who recently purchased the building of the Weneeda Mills, has installed complete equipment for ginning cotton with a capacity of four bales an hour, and will operate as the Weneeda Mills.

Birmingham—Distilling Company.—Lem Motlow, J. B. Motlow and Thomas Motlow have incorporated the Motlow Distilling Co., with \$20,000 capital.

Birmingham—Foundry and Machine Shop. Brantley Manufacturing Co. has incorporated, with \$100,000 capital, to conduct foundry and machine shop, manufacture cotton gins, cotton-mill and cottonseed-oil-mill machinery; incorporators, H. Linden Zell of Birmingham, Ben T. Wade of Troy, N. C., and J. S. Boggs of Albany, Ga.

Birmingham—Coal-mining, etc.—Incorporated: Barge Line Coal & Coke Co., with \$25,000 capital, by J. W. Miller of Green Pond, Ala.; F. G. Moore of Ensley, Ala.; J. W. and F. Vandenberg of Vance, Ala., and T. H. Moore of Tidewater, Ala. Company will mine coal, construct and operate barges and other vessels to transport coal.

Florence—Trousers Factory.—Reports state that M. Friedland will establish plant for the manufacture of trousers.

Huntsville—Lumber Mill.—It is reported that James B. Rickey and associates of Tennessee have secured site in North Huntsville on which to erect lumber mill.

Huntsville—Distillery.—Sidney Lucas Distilling Co. has incorporated, with \$100,000 capital, to establish and operate a whiskey distillery near Huntsville. Sidney Lucas is president and general manager, and D. C. Mahoney, secretary-treasurer (both of Nashville, Tenn.). The business of Sidney Lucas & Co. of Nashville, Tenn., has been acquired.

Morris—Water-works.—Morris Improvement Co., reported incorporated last week under Birmingham, Ala., with \$10,000 capital, will construct water-works, using water-power for pumping.*

Selma—Telephone System.—Maplesville & Selma Telephone Co. has been incorporated by H. N. Rider, L. C. Elevash, E. E. Todd, T. M. Crumton and others, with \$4000 capital, to construct telephone line from Selma to Maplesville.

ARKANSAS.

Clarksville—Realty Company.—Spears Realty Co. has been incorporated with \$150,000 capital. Thomas Cox of Little Rock, Ark., is president; J. H. Basham, vice-president; Chas. T. McKennon, secretary, and Chas. F. Penzel, Little Rock, Ark., treasurer.

Foreman—Electric-light Plant.—It is rumored that H. M. and E. P. McIver will establish electric-light plant.

Hot Springs—Laundry.—Incorporated: People's Laundry Co., with \$25,000 capital. Joseph Longnotti is president; Dr. J. W. McClelland, vice-president; S. W. Leslie, secretary, and E. F. Klein, treasurer.

Hot Springs—Ice Plant.—It is reported that the City Ice Co. contemplates enlarging its plant from 45 tons daily capacity to 100 tons.

Johnson—Lime Works, Coopers, etc.—Fayetteville White Lime Works has been incorporated by H. L. Johnson, S. C. Beane, B. C. Beane and F. P. Barnett to manufacture

ture and sell lime, plaster, cement, barrels, crates and all kinds of cooperage; capital \$30,000; principal office, Fayetteville, Ark.

Little Rock—Electric-light Plant Improvements.—The improvements reported last week as being contemplated for the city's electric-light plant at a cost of \$10,000, will consist of the erection of brick addition 40x60 feet and the installation of new boilers. John W. Bleidt is superintendent.*

Stuttgart—Flour Mill.—Burks & Lancaster Mill Co. has been incorporated, with \$15,000 capital, to erect and operate a 75-barrel flour mill and cornmeal plant. Eugene J. Lancaster is president; P. J. Lancaster, vice-president, and Ray O. Burks, secretary-treasurer.

Texarkana—Mercantile.—Interstate Mercantile Co. has filed an amendment to its charter, changing its name to the Brewer & Sanderson Company and increasing capital from \$10,000 to \$50,000.

FLORIDA.

Apopka—Lumber and Veneer Company.—Consumers' Lumber & Veneer Co. contemplates enlarging and improving plant. E. A. Thomas is president.

Jacksonville—Fruit Company.—Chartered: Baracoa Fruit Co., with \$15,000 capital, by H. S. Bayer and C. T. Halsey.

Jacksonville—Drug Company.—Incorporated: Florida Drug Co., with \$25,000 capital. B. F. Dillon is president, and Wm. S. Dillon, secretary.

Miami—Ice and Cold-storage Plant.—Honda East Coast Ice Co., and not the Miami Ice Works, as reported last week, will erect 35-ton ice plant and install cold-storage equipment. Contract has been let.

GEORGIA.

Augusta—Ice Plant.—Reports state that company will be formed to establish plant for the manufacture of ice. G. H. Howard can give information.

Buford—Public Improvements.—City has voted affirmatively the proposed \$20,000 bond issue for water-works, electric-light plant and school buildings. Address The Mayor.

Chatham—Pipe Foundry.—John F. Freeman, James H. McKenna, Thomas G. Philpot and U. H. McLaws have incorporated the Savannah Pipe & Foundry Co., with \$10,000 capital, to manufacture all kinds of pipe.

Columbus—Woodworking Plant.—D. J. Carrison, D. T. Blakely and Z. W. Carrison have incorporated the Carrison Veneer Co. to manufacture veneers.

Cordele—Engraving Plant.—N. F. Cornett, foreman of the News Publishing Co., will install engraving plant.

Cotton—Cotton Gin and Grist Mill.—Maples Gin & Manufacturing Co. will rebuild cotton gin and grist mill reported burned last week at a loss of \$7000.

Dalton—Ice Factory and Cold-storage Plant.—Reports state that Daugherty Bros. of Alpine, Texas, are investigating with a view to establishing ice factory and cold-storage plant.

Elberton—Sewerage System.—City will vote November 10 on the issuance of \$20,000 of bonds for constructing sewerage system. Address The Mayor.

Macon—Fertilizer Factory.—Reports state that the Ashpoo Fertilizer Co. of Charleston, S. C., Frank E. Taylor, vice-president and general manager, has purchased 80 acres of ground in East Macon on which to erect fertilizer works. Plant will have an annual capacity of 30,000 tons.

Macon—Tannery.—G. Bernd, Joseph Bloch and C. I. Allen have incorporated the Ocmulgee Tanning Co., with \$10,000 capital.

Marietta—Furniture Company.—Carnes Furniture Co. has been incorporated, with \$10,000 capital, by L. B. Carnes, John P. Cheney, C. C. Grist and others.

Moderan (not a postoffice)—Syrup Mill.—Maples Gin & Manufacturing Co., D. M. Rogers, president, Cotton, Ga., will erect syrup mill.

Rome—Crates, Fruit Packages, etc.—C. L. King Manufacturing Co. will increase capital \$20,000 for enlarging and improving plant, including the erection of warehouse.

Savannah—Steamship Line.—Incorporated: Gibson Line of steamers, by William T. Gibson, Walter F. Gibson, John F. Paulsen, Van B. Avery and Joseph F. O'Brien, with \$25,000 capital.

Savannah—Excelsior Factory.—Excelsior Manufacturing Co., previously reported incorporated with \$5000 capital to establish plant and equip with machinery for the manufacture of excelsior, contemplates enlarging plant.

Savannah—Wood Distillation.—A. J. McArthur of Gainesville, Fla., previously noted as

investigating with a view to establishing refining plant for wood spirits, is now located at Barnard and 34th streets, Savannah. Mr. McArthur contemplates establishing steam-process plant for extracting spirits from pine wood. About \$200,000 will be invested.

Savannah—Mercantile, etc.—George W. Hann, John C. L. Visser and associates have incorporated the Holbrook Company, with \$50,000 capital.

Savannah—Cotton Compress.—Murray M. Stewart has had plans and specifications prepared for proposed cotton compress to be erected at a cost of about \$100,000; plant will have a daily capacity of 2000 bales.

Swainsboro—Cotton Mill.—Jesse Thompson, Sr., is proposing organizing a company with capital of \$100,000 to build a cotton mill, utilizing water-power and buildings already erected.

Thomasville—Sewerage System and Electric-light Plant.—City will vote November 10 on the issuance of \$25,000 of bonds for extending sewerage system and \$35,000 for erecting or purchasing electric-light plant. Address The Mayor.

Tifton—Water-works.—City will vote November 15 on the issuance of \$30,000 of bonds for the construction of proposed water-works. Address The Mayor.

Washington—Construction Company.—Incorporated: Washington & Elberton Construction Co., with \$20,000 capital, by C. E. Smith and associates.

KENTUCKY.

Beattyville—Oil Wells.—Kentucky Union Oil Co. has been organized, with \$3,000,000 capital, to develop oil wells. James P. Adams of Beattyville is president, and R. A. Wade of New York, manager.

Ely (P. O. Flatlick)—Coal-mining.—John

rated: A. H. Bowman & Co., with \$5000 capital, by A. H. Bowman, Lee S. Bernheim and Joseph Seligman.

Madisonville—Water-works.—City will hold an election November 8 to decide the question of water-works. Address The Mayor.

Princeton—Water-works.—City will vote November 8 on the \$40,000 bond issue reported last week as contemplated for the construction of water-works. Address The Mayor.

Sturgis—Electric-light Plant.—City will let 20-year franchise for electric-light plant. For form of bid and further particulars address Mark E. Eastin, mayor.

LOUISIANA.

Alexandria—Levee Work.—P. B. Compton of Alexandria has contract to construct a private levee consisting of about 5200 cubic yards at Grimes Bluff, on the Red river, 30 miles below Alexandria.

Covington—Water-works.—Town has under contemplation the construction of water-works system. Address Town Clerk.

Iberville—Lumber and Shingle Company.—Schwing Lumber & Shingle Co., Ltd., has increased capital from \$60,000 to \$150,000.

Lake Charles—Hardware Company.—J. Frank Hardware Co. has incorporated, with \$25,000 capital. W. J. Gayle is president; L. Farque, secretary-treasurer, and J. Frank, manager.

New Orleans—Educational.—T. W. Dyer, H. S. Chenet, R. McC. Perrin, P. Werlein and associates have incorporated the University School and Business College, Ltd., with \$25,000 capital.

New Orleans—Amusement Company.—Wilson Waterman Co., Ltd., has been incorporated by W. R. Wilson, G. A. Waterman, L. E. Valoff, B. P. Sullivan, Arsene Perillat

of Washington, D. C., will establish brick-making plant with a daily capacity of 50,000 bricks.

Cambridge—Publishing.—Edward S. Phillips, Sewell M. Moore, V. Wood Messick, Alfred Stewart and Phillips Lee Goldsborough have incorporated the Dorchester Standard Publishing Co., with \$1800 capital.

Chestertown—Gas Plant.—People's Gas & Supply Co. is the title of company reported last week as being incorporated by John D. Urie, Charles S. Smith, W. F. Russell and associates to manufacture and supply gas to the town; capital \$20,000.

Hagerstown—Furniture Factory.—William H. Armstrong, Alexander Armstrong, Samuel B. Looze, John K. Beckenbaugh and Daniel H. Broguler will organize the Hagerstown Showcase & Furniture Co., with \$12,000 capital, to manufacture furniture, etc. A site has been secured and building will be erected at once.

Mt. Washington—Copper-mining.—It is reported that H. S. Cummings of Washington, D. C., has purchased the Bare Hill copper mine, comprising 150 acres of land, and will at once arrange for its operation. G. W. Lehman, office in City Hall Annex, Baltimore, Md., is consulting engineer.

Towson—Grading.—Baltimore County Commissioners have let contract to Hook & Ford Contracting Co., 216 North Liberty street, Baltimore, Md., at \$32,915 for macadamizing and construction work on Park Heights avenue, previously reported.

MISSISSIPPI.

Canton—Ice Factory.—Mississippi Company contemplates enlarging plant by the installation of 75-ton ice machine.

Canton—Cotton Gin.—Incorporated: Canton Gin Co., with \$16,000 capital.

Corinth—Cotton Compress.—J. H. Collier and associates contemplate organizing company to erect and operate a cotton compress at a cost of about \$30,000.

Jackson—Music Company.—J. W. Patton Music Co. has been incorporated with \$30,000 capital.

Laurel—Woodworking Plant and Box Factory.—Frank Gardner is investigating with a view to establishing woodworking plant and box factory.

Meridian—Cannery.—Reports state that the J. A. Abrams Canning Co. of Fruitdale, Ala., and J. A. Silver of Lexington, Mo., contemplate establishing canning factory.

Newton—Water-works.—City has engaged W. F. & A. D. Wilcox of Jackson, Miss., to prepare plans and specifications and supervise the construction of water-works system, for which an election will be held to vote on the issuance of \$17,000 of bonds for that purpose. Address The Mayor.

Philadelphia—Saw-mill.—It is reported that Chicago capitalists contemplate erecting \$75,000 saw-mill. Names of interested parties will be announced later.

Shuqualak—Supply Company.—Hubbard Supply Co. has been incorporated, with \$10,000 capital.

MISSOURI.

Granby—Telephone System.—Granby & Neosho Telephone Co. has been incorporated, with \$3000 capital, by J. J. Cummins, George M. Spangle, John Kingston and others.

Highlandville—Canning Factory.—J. R. Wray, F. F. Kentliney, J. C. White and others have incorporated the Highlandville Canning Co., with \$2250 capital.

Irondale—Townsite Company.—Cherry Townsite Co. has been incorporated by J. I. Robinson, Walter Schmalz, A. P. Robinson and others.

Joplin—Zinc and Lead Mines.—Mary F. Robinson, Marie Scott Robinson, Bud M. Robinson and others have incorporated the General Zinc & Lead Co., with \$3000 capital, to operate zinc and lead mines.

Kansas City—Car Company.—Incorporated: Kansas City Car Co., with \$100,000 capital, by C. B. Eaton, A. C. Hunt and L. Harwood.

Kansas City—Can Factory.—Kansas City Can Co. has been incorporated, with \$100,000 capital, and C. B. Eaton of Denver, Col., president; W. R. Eaton, vice-president, and A. C. Hunt, secretary-treasurer. Building has been secured at 1200-1204 West 11th street, which will be equipped for manufacturing plain, decorated and lithographed cans.

Kansas City—Refrigerating Plant.—It is reported that the Baltimore Hotel Co., A. J. Dean, president, will install refrigerating plant.

Kansas City—Distillery.—M. C. Reefer, Julius Reefer and Z. Reefer have incorporated the Green Mountain Distillery Co., with \$400,000 capital.

Kansas City—Asbestos and Roofing Com-

Results Have Been Satisfactory.

THE PENN METAL CEILING & ROOFING CO., LTD.,
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G. Matthews, president of the First National Bank, Barboursville, Ky., is arranging for the development of coal properties near Ely.

Lexington—Warehouse Company.—W. C. Smith, C. D. Chennault and J. M. Kelly have incorporated the Lexington Warehouse Co. with \$25,000 capital.

Lexington—Candy Factory.—I. W. Kennett and associates have organized the Bluegrass Candy Factory, with \$50,000 capital, to manufacture candy. Mr. Kennett was previously reported as negotiating for the establishment of candy factory.

Louisiana—Sewerage System.—John Thomas is engineer in charge of sanitary sewer system previously reported to be constructed.

Louisville—Gas By-product Plant.—It is reported that Udolpho Sneed, president of the Louisville Gas Co., and other stockholders, together with Eastern capitalists, will organize company for the establishment of plant to utilize the by-products of artificial gas.

Louisville—Gas Reservoir.—Louisville Gas Co. is building reservoirs for securing additional pressure for fuel gas. Udolpho Sneed is president.

Louisville—Stemming Machine.—Reports state that Frederick Frankenberg and T. L. Paulson of Chicago, Ill., are investigating site for the establishment of plant to manufacture tobacco stemming machinery. About \$40,000 will be invested.

Louisville—Drug Factory.—Incorporated: California Good Health Co., with \$20,000 capital, by Thomas T. Turner, H. C. Turner and Lawrence Leopold to manufacture drugs.

Louisville—Brewing Company.—Incorporated: West Louisville Brewing Co., by Charles J. Becker, T. L. Block, Frank Schaefer and J. William Luhr; capital \$30,000.

Louisville—Commission Company.—Incorpo-

and associates, with \$50,000 capital, to operate theaters, parks and other amusement places.

New Orleans—Coaling Plants.—Monongahela Consolidated Coal & Coke Co. will install machinery for coaling vessels at a cost of about \$40,000; plant will have an hourly capacity for loading of 100 tons.

New Orleans—Cotton Company.—William Atkinson Cotton Co., Ltd., has incorporated, with \$30,000 capital. William Atkinson is president; Luther S. Atkinson, secretary, and William J. Atkinson, treasurer.

New Orleans—Undertakers.—McMahon Burial Co., Ltd., has been incorporated, with \$35,000 capital. Henry T. Lawler is president.

New Orleans—Electric-light Plant.—Consumers' Electric Co. (reported organized in June with Jules Dreyfous, president; Charles Godchaux, vice-president, and Gus Lehman, Sr., secretary-treasurer, to erect four-story fireproof building and equip with machinery for manufacturing electricity) is arranging for the erection of plant after plans by Emile Well, who will supervise construction. Main engine will have 6500 horse-power.

Welsh—Rice Grist Mill.—It is reported that A. T. Jones has purchased the Welsh planing mill, which will be remodeled and equipped for converting rough rice into ground feed and clear rice into flour.

Whitecastle—Lumber Company.—Bowle-Brown Lumber Co. has been organized by W. F. Brown of Whitecastle and George Bowie of Weatherford, Texas.

MARYLAND.

Berlin—Planing Mill.—Thomas J. Whaley will rebuild planing mill reported burned last week at a loss of \$5000.*

Brentwood—Brick Works.—Thos. R. Riley

pany.—Kansas City Asbestos & Roofing Co. has been incorporated with \$5000 capital by Alfred M. Wiker, James W. Reed, Janet D. Wiker and Harriet M. Reed.

Kansas City—File and Rasp Company.—Incorporated: Bell File & Rasp Co., by W. F. Graham, Walter Rider, M. L. Bell and others; capital \$5000.

Perryville—Real Estate, Farming, etc.—Kiesler Land Co. is the correct title of company reported last week as incorporated with \$14,000 capital by H. G. Kiesler, J. H. Kiesler, C. A. Kiesler and others.*

Point Pleasant—Lumber Company.—Cronan-Smith Lumber Co. has been incorporated, with \$10,000 capital, by James W. Cronan, Harry W. Smith and Ida M. Cronan.

Sedalia—Cold-storage Plant.—Emerson Marlow & Co., 87 South Water street, Chicago, Ill., reported last week as to build cold-storage warehouse, will erect building four stories 80x100 feet. W. S. Garber is engineer in charge.*

Sedalia—Construction Company.—E. I. Grigsby, H. N. Hupp and J. E. Piggott have incorporated the Stone Construction Co. with \$50,000 capital.

Sedalia—Clothing Company.—C. K. Barnes, James P. Kun and Wellington Barnes have incorporated the Barnes-Kun Clothing Co. with \$20,000 capital.

St. Joseph—Machine Shop.—Reports state that W. E. Jamieson, formerly of the Jamieson-Combe Iron Works, will erect building and equip as machine shop.

St. Joseph—Oil and Gas Wells.—Joe Kun Oil & Gas Co. has incorporated with \$12,000 capital to drill for oil and gas; incorporators: R. M. Ladwig, J. M. Fisher, Porter A. Thompson and Field Bohart.

St. Louis—Cigar and Tobacco Factory.—Johnson-Lohelde Manufacturing Co., office 21 South 4th street, has been incorporated, with \$10,000 capital, to manufacture cigars and tobacco; incorporators, William C. Johnson, Jr., Herman L. Lohelde, Perry Post Taylor of St. Louis and W. W. Pollock of Mexico, Mo.

St. Louis—Automobile Works.—A. L. Dyke, Carrie Dyke and Charles Peters have incorporated the Original Automobile Supply Co., with \$10,000 capital, to manufacture and deal in automobiles and supplies.

St. Louis—Rope and Twine Manufacturing, Incorporated.—The Robert Morrison Self-Lubricating Packing Co., capital stock \$5000, for manufacturing rope, twine, etc., by John H. Avery and others.

St. Louis—Candy Factory.—Fairy Floss Candy Machine Co. of Missouri has been incorporated, with \$10,000 capital, by M. E. Gilliland, E. W. Jacobs and B. Greensfelder, to manufacture and deal in candy.

St. Louis—Laundry.—Citizens' Laundry Co. has been incorporated, with \$3000 capital, by Herbert M. Edmunds, Charles M. Hunt and Claude A. James.

St. Louis—Machine Works.—Incorporated: Rogers-Haines Machine Co., by Richard H. Rogers, Henry W. Haines and Charles W. Stratford, to manufacture gasoline and all other kinds of illuminating machines, plants, etc.; capital \$10,000.

St. Louis—Machine Works.—S. N. House, Walter W. Scott, Martin Mittler, Talmage Wardlaw, Henry Moyers and J. L. Scott have incorporated the House Cold Tire Setter Co. with \$200,000 capital, to manufacture cold tire shrinking machines for vehicle wheels, etc.

St. Louis—Pharmaceutical Plant.—Denthol Chemical Co. has incorporated, with \$10,000 capital, to manufacture and sell dental and pharmaceutical preparations, etc.; incorporators, Edw. C. Haverstick, Herman J. Nickel and Andrew J. Haverstick.

Webb City—Mining.—F. E. Rogers, A. L. Williams, Amasa Corbin and others have incorporated the Reliance Mining Co. with \$200,000 capital.

NORTH CAROLINA.

Asheville—Cotton Mill.—The Elk Mountain Cotton Mill Co., reported organized in August last, has a paid-in capital of \$150,000. It has secured suitable building and let contract for installation of machinery, mainly 100 looms for manufacturing damasks.

Charlotte—Textile Finishing Plant.—Sam'l. Lee's Sons Co., 1148 American street, Philadelphia, Pa., contemplates establishing a textile finishing plant in Charlotte, and is now endeavoring to secure a suitable site. An investment of \$150,000 is proposed. Cotton and woolen goods will be bleached, dyed, napped, printed and otherwise finished.

Fayetteville—Manufacturing Plant.—It is reported that A. J. Smart of Columbus, Ohio, will establish manufacturing plant.

Fayetteville—Cotton Mill.—William Coleman of Whitmires, S. C., reported last week

as to build cotton mill at Fayetteville, intends that the equipment will be 25,000 spindles and 800 looms. About \$500,000 will be invested. W. D. McNeill of Aragon, Ga., will be manager. Site has been purchased and active building will begin next spring.

Gibson—Brick Works.—Green Pond Granite Brick Co., reported incorporated last month, will establish plant for the manufacture of sand-lime bricks, and have a daily capacity of 18,000 bricks; size of plant 100x54 feet; authorized capital \$125,000. J. D. Mason is architect.

Greensboro—Gas Plant.—Pintch Gas Co. of Atlanta, Ga., will erect building and install machinery for the manufacture of illuminating gas for railroad cars.

Greensboro—Bobbin Factory.—Southern Bobbin Co. has incorporated with \$50,000 capital to manufacture bobbins, etc.; incorporators: R. C. Sharp, J. S. Cox, S. H. Boyd, G. W. White and K. H. Wright.

Greensboro—Cotton Mill.—It is proposed to organize a company, with capital of \$10,000, to build cotton mill of 5000 spindles and 200 looms. Names of interested parties not announced as yet.

Greensboro—Grocery Company.—S. E. Hudson and associates have incorporated the Hudson Grocery Co., with an authorized capital of \$10,000.

North Carolina—Ice Plant.—Henry A. Pressey, civil and hydraulic engineer, 1416 F street, Washington, D. C., is engineer in charge of 15-ton ice plant to be built by a company in North Carolina.

North Wilkesboro—Millinery.—J. B. Jenkins, S. L. Jenkins, Jr., and R. W. Gwyn have incorporated the Jenkins Company with an authorized capital of \$50,000.

Raleigh—Cigar Factory.—Reports state that M. F. Fisher will establish plant for manufacturing cigars.

Shelby—Saw-mill.—J. F. Williams and T. W. Tucker have purchased site on which to erect saw mill.

Spencer—House-furnishing Company.—Spencer House-Furnishing Co. has been incorporated by J. K. Dorsett and others with an authorized capital of \$30,000.

Wadesboro—Live-stock Company.—Reports state that a \$25,000 company is being organized to deal in live-stock, and W. B. Kerr of Atlanta, Ga., will be manager.

Washington—Cotton Gin.—Chartered: Washington Gin Co., with \$100,000 authorized capital, by William Brazaw, H. B. Mayo and others.

Wilmington—Grocery Company.—Co-operative Grocery Co. has been incorporated, with an authorized capital of \$25,000, by S. S. Drew, J. D. Price and others.

Windsor—Mercantile.—R. H. Moore and others have organized the Windsor Bargain House Co. with an authorized capital of \$10,000.

Winston-Salem—Furniture Company.—Forsyth Furniture Co. has been incorporated with \$125,000 capital. Contract has been let to Fogle Bros. for the erection of two two-story frame buildings, each 150x60 feet.

SOUTH CAROLINA.

Bishopville—Water-works.—City is having surveys made by Charles C. Wilson, 1942 Main street, Columbia, S. C., for water-works system for which bonds were previously reported voted.*

Charleston—Woodworking Plant.—Sterling Manufacturing Co. has been incorporated with \$10,000 capital to manufacture sash, doors and blinds; incorporators, J. F. Piper, J. P. King and John D. Cappellmann.

Georgetown—Lumber Company.—Chartered: Unelda Timber Co., with \$250,000 capital; E. C. Benedict, president; E. L. Lloyd, secretary, and E. L. Parr, treasurer.

Lancaster—Water-works and Electric-light Plant.—Leroy Springs and T. Y. Williams have secured franchise for the construction of water-works and electric-light plant. (Franchise reported last month as having been granted to H. L. Millner of Morganton, N. C., for constructing these plants has been abandoned.)

Lexington—Cotton Mill.—The Lexington Manufacturing Co. will build an addition to its 350-spindle and 204-loom plant. Erection of building has begun.

North Augusta—Cotton Mill.—Walter M. Jackson of Augusta, Ga., proposes organizing a company to build a cotton mill in North Augusta.

Rion—Medicine Factory.—L. S. Morrow and E. F. Pagan, Jr., have incorporated the Gonos Remedy Co., with \$50,000 capital.

Swansea—Crate Factory.—W. B. Rast has purchased the crate and basket plant of F. C. Fishburne of Charleston, S. C., which will

be removed to Swansea, and has organized the Swansea Crate & Basket Veneer Co. with \$10,000 capital to operate it. Mr. Rast is president of the company; P. M. Oliver, secretary-treasurer, and F. M. Pooser, manager.

TENNESSEE.

Brownsville—Cotton Mill.—The Commercial Club is endeavoring to locate a cotton mill.

Gatlinburg—Coal-mining.—Dixie Coal Co., recently incorporated at Nashville, Tenn., with \$65,000 capital, has changed its name to the Westbourne Coal Co. and will at once arrange for the development of 3000 acres of coal land near Gatlinburg and erect 100 miners' houses.*

Chattanooga—Stove Works.—Tennessee Stove Works has been organized by J. L. Caldwell, R. B. Davenport, G. N. Henson, J. L. Foust, G. W. Carey, Geo. F. Neese and R. L. Westcott, with an authorized capital of \$100,000, for the manufacture of stoves. Two brick buildings will be erected at once; warehouse with molding and cleaning rooms will be 100x275 feet; molder's room 100x200 feet. Output will be 600 stoves per week.

Chattanooga—Coffin Factory.—Chattanooga Burial Case Co. will be organized, with \$50,000 capital, to manufacture coffin caskets. Building has been secured and machinery installed, giving the plant a weekly output of 125 caskets. The plant will be controlled by the Central Manufacturing Co., and H. C. Smith will be general manager.

Columbia—Incubator Factory.—It is reported that Joseph B. Ranney of Bellefontaine, Ohio, is negotiating with a view to establishing incubator factory. If negotiations result satisfactorily Mr. Ranney contemplates organizing \$25,000 company to operate the plant.

Fryersburg—Cotton Gin.—R. M. Hall, John Hamilton, L. Harrison, N. B. Maxey and J. M. Brackin have incorporated the Merchants' Gin Co., with \$5000 capital.

Jackson—Electric-light and Power Plant.—Jackson Light & Power Co. has applied for franchise to construct electric-light and power plant.

Knoxville—Drug Company.—Sam Harbison, M. L. Crippen, S. G. Shoemate and others have incorporated the Harbison Drug Co., with \$5000 capital.

McMinnville—Furniture, Coffins, etc.—W. J. Rice of McMinnville and Sam T. Lively of Nashville, Tenn., reported last month as to erect plant for the manufacture of furniture, coffins, sashes, doors, etc., will operate as the W. J. Rice Lumber Co.*

Memphis—Automobile Factory.—Memphis Motor Carriage Co. is the correct title of company reported last month incorporated, with \$100,000 capital, to manufacture motor carriages, delivery wagons, trucks, etc. Building 50x150 feet will be erected. H. W. Pilcher, Randolph Building, is engineer in charge.*

Nashville—Furniture Company.—Robertson Furniture Co. has been incorporated, with \$5000 capital, by J. D. Robertson, W. P. Howe, R. B. Ogilvie, J. S. Rose and John B. Howe.

Ozone—Coal Mines.—N. C. Chapman of St. Louis, Mo., and associates have leased and will operate the mines of the Tennessee Lumber & Coal Co.

Shelbyville—Iron Ore.—Samuel H. Jennings has discovered large quantities of iron ore on his lands near Shelbyville.

Tazewell—Coal-mining, etc.—Chartered: Tennessee & Kentucky Land & Mineral Co., with \$24,000 capital, by G. W. Montgomery, Sam M. Love, W. D. Long, T. J. Seultz and E. F. Schultz, to mine coal and other minerals.

TEXAS.

Alvarado—Electric-light Plant Improvements.—Alvarado Water, Light & Power Co. reported last month as having purchased the electric-light plant of E. Quilitch, will arrange at once for increasing the capacity. U. E. McQuatters is engineer in charge. About \$15,000 will be expended.

Amarillo—Sewerage System.—City has voted affirmatively the proposed \$45,000 bond issue for sewerage purposes. Address Tue Mayor.

Beaumont—Turpentine Distillery.—Reports state that E. T. and H. B. Collins of Rogansville, Texas, will establish turpentine-distilling plant.

Beaumont—Oil Wells.—Raccoon Oil Co. has incorporated, with \$15,000 capital, to drill for oil; incorporators, J. C. Walker, I. Block, J. F. Horkan, C. W. Howth and R. C. McFarlan.

Calvert—Fruit and Truck Packery.—It is reported that a fruit and truck packery will be established, and H. L. Stricker is promoting the enterprise.

Closter (not a postoffice)—Real Estate.—

Chartered: Closter Townsite Co., with \$20,000 capital, to purchase ground in Closter and subdivide into building lots; incorporators, John Closter, W. S. Dougherty of Hidalgo, Texas, and Uriah Lott of Brownsville, Texas.

Dallas—Street Paving.—Board of Public Works has let contract to W. S. Hipp at \$845.60 for resurfacing with gravel Dallas avenue and San Felipe street.

El Paso—Water-works.—Charles Davis, representing Eastern capitalists, has applied for franchise to construct and operate water-works. It is stated that if the franchise is granted a company will be organized with \$1,000,000 capital.

El Paso—Marble Company.—C. W. Ohndorf, J. W. Scott, E. W. McCormick and associates have incorporated the Eagle Springs Marble Co. with \$500,000 capital.

Fordyce (not a postoffice)—Water-works, Irrigation, etc.—John Closter, W. S. Dougherty, Charles Schunior of Hidalgo, Texas; Uriah Lott of Brownsville, Texas, and John T. Biddle of Chicago, Ill., have incorporated the Yohum Land & Irrigation Co., with \$250,000 capital, to conduct a general system of irrigation and water-works in the counties of Starr, Cameron and Hidalgo.

Fort Worth—Machinery Company.—John T. Abbott Machinery Co. has been incorporated, with \$10,000 capital, to deal in new and second-hand machinery; incorporators, John T. Abbott, Adrian Frongquist and Adam H. Herdman.

Galveston—Cooperage.—Texas Cooperage Co. has been incorporated by John W. Groce, W. L. Moody, Jr., and C. J. Hay.

Galveston—Water-works Improvement.—Reports state that another 34-inch water main to be constructed across the bay from Alta Loma is contemplated; cost \$114,000. H. C. Lange is commissioner of water-works.

Grand Saline—Salt Works.—A. Wilderspin, T. E. Martin and J. E. Persons have incorporated the Southern Salt Co., with \$20,000 capital, to develop salt deposits.

Helena—Cotton Gin.—J. P. Brown will rebuild cotton gin recently burned; size of plant 50x100 feet; capacity 75 bales daily; capital to be invested \$10,000. Wm. L. Brown is engineer in charge.*

Houston—Mercantile.—Incorporated: L. H. Burke & Son, with \$20,000 capital, by L. H. Burns, David F. Burns and others.

Houston—Coffee Plant.—Reports state that the Check & Neal Coffee Co. will enlarge plant and install equipment for doubling the capacity.

Houston—Elevator Works.—Otis Elevator Co., previously reported as investigating site, through H. M. Robbins, Jr., for the establishment of elevator works, is erecting two two-story buildings—one 50x100 feet, the other 30x30 feet. Company will later build structure 200x550 feet. Freight and passenger elevators will be manufactured. Office, 418-419 Mason Block, Houston, Texas.

Mabank—Oil Wells, etc.—Mabank Oil, Coal & Lead Co. has been organized, with \$20,000 capital, to drill for oil. Company will sink a well at Sulder Springs, nine miles distant.

Seaford—Electric-light and Ice Plant.—Alfred Walters is erecting electric-light plant and will later install ice plant of 10 tons capacity.*

Suerman—Musical Instruments.—Armstrong Piano Co. has been incorporated, with \$10,000 capital, by George Rogers, Edwin Kild and others, to deal in musical instruments of all kinds.

Waco—Water-works.—City has voted the proposed issuance of \$200,000 of bonds for the construction of water-works. Address The Mayor.

Winnboro—Publishing.—Nylander Carson, R. G. Andrews, T. G. Carlock, R. B. Howe and George D. Hurdle have incorporated the Winnboro Printing Co. with \$4000 capital.

VIRGINIA.

Coffee—Telephone System.—E. H. Brockenhough, E. B. Millner of Coffee, A. W. Scott, J. F. Hudson and A. Meschendorf of Forest Depot, Va., will organize the Bedford & Campbell County Telephone & Telegraph Co. to construct a telephone line from Coffee to Lynchburg via Perrowville and Forest Depot; authorized capital \$3000.

Norfolk—Stock Farm.—Ribble Farm Co., with Ralph H. Riddleberger, president; R. K. Smythe, vice-president, and J. R. Walker, secretary-treasurer; capital \$10,000.

Norfolk—Transportation Company.—Lamb's Transportation Co. has been incorporated with \$5000 capital; H. W. Lamb, president; J. W. F. Williams, vice-president, and Ralph H. Riddleberger, secretary-treasurer.

Norfolk—Warehouse Corporation.—Federal Warehouse Corporation has been incorpo-

rated with an authorized capital of \$50,000. George J. Twoby is president; W. D. Pender, vice-president, and A. G. Bailey, secretary-treasurer.

Parkley—Development Company.—Incorporated: Accomac Development Corporation, to acquire oyster grounds. Henry R. Bennett is president; George W. Maxon, secretary, and William McK. Taylor, treasurer.

Richmond—Realty Company.—Incorporated: Lee Annex Realty Corporation, with \$10,000 capital. J. G. McNeal of Garysburg, N. C., is president; Dr. Creecy, Jr., of Norfolk, Va., vice-president, and J. L. Bunting of Norfolk, Va., secretary-treasurer.

South Norfolk—Barrel Factory, Cooperage, etc.—It is reported that T. C. Lee will establish plant for the manufacture of barrels, crates, baskets, etc. Site has been purchased and building will be erected at once.

WEST VIRGINIA.

Benwood—Oil and Gas Wells.—Marshall Oil & Gas Co. has been incorporated, with \$5000 capital, to drill for oil and gas; incorporators, M. F. Deegan, Charles Schad, W. D. Schad, Fred H. Gatho of Benwood and Fred Vieweg of Wheeling, W. Va.

Clarksburg—Cigar and Tobacco Factory.—Incorporated: R. Koblegard Company, by W. R. Fowks, John H. Drummond, George T. Smith, Robert B. Koblegard and James T. Brundy, to manufacture cigars, stogies and tobaccos; capital \$25,000.

Paden City—Glass Works.—Paul Wissmuth, Everett K. Cales, John W. Cales of Brooklyn, N. Y.; Eugene F. Stryker and Charles W. Stryker of Patterson, N. J., have incorporated the Onlo Valley Glass Co., with \$50,000 capital, to manufacture and sell all kinds of glass.

Piedmont—Coal-mining.—Stafford Coal Mining Co., reported incorporated last week with \$25,000 capital, to operate the mines of the Piedmont & Potomac Coal Co., recently purchased, has completed organization, with F. A. Husted of Piedmont, W. Va., president; G. I. Stafford, Baltimore, Md., vice-president and general manager, and J. O. Stafford, 801 South Caroline street, Baltimore, Md., secretary-treasurer. Mines will have a daily output of 350 tons of steam, domestic and smelting coal. N. Allen Stockton, Philadelphia, Pa., is engineer in charge.

Ronceverte—Hardware Company.—C. J. Leftwich, R. L. Wright, J. O. McClung, Mrs. Cassie B. Smith and R. H. Smith have incorporated the Bob Smith Hardware Co., with \$20,000 capital.

INDIAN TERRITORY.

Savanna—Coal-mining.—W. E. Halley Coal Co. has been incorporated, with \$25,000 capital, to operate coal mines. W. E. Halley is president; W. P. Halley, vice-president, and J. T. Lockard, secretary-treasurer.

South McAlester—Telephone System.—Schroeder Bros. Telephone Co. has been incorporated with \$100,000 capital to build and operate a telephone exchange, for which franchise was recently granted. H. H. Keller is president.

OKLAHOMA TERRITORY.

Oklahoma City—Bottling Works, Ice Plant and Warehouse.—Fred Miller Brewing Co. of Milwaukee, Wis., has had plans prepared for bottling works, ice plant and warehouse.

Oklahoma City—Water-works.—W. F. Hudson has made a proposition to the city to furnish 3,500,000 gallons of water every 24 hours for \$25,000 annually.

Oklahoma City—Asphalt Refinery.—A. T. Hamilton and associates will organize company to refine asphalt, and will install 50-ton refinery.

Oklahoma City—Oil, Gas and Coal.—Black Jack Oil, Gas & Coal Co. has been incorporated, with \$1,000,000 capital, to operate oil, gas and coal lands; incorporators, William W. Mead, John S. Walther of Cleveland, O. T.; Wm. H. Stedman, W. E. and W. W. Phelps of Choctaw, O. T.

Oklahoma City—Oil and Gas Wells.—C. G. Jones, C. F. Colcord of Oklahoma City and Robert Galbraith of Red Fork, I. T., have incorporated the Oklahoma City Oil & Gas Co. to drill for oil and gas; capital \$200,000.

BURNED.

Americus, Ga.—M. B. Council's cotton gin; loss \$3000.

Batson, Texas.—Oil-mill rigs, pumping machinery, tanks, boilers, etc., of Margaret Hel, loss \$4000; Farish & Simms, loss \$5000; Batson Oil Co., loss \$1000; Alert Oil Co., loss \$2000; Barkley & Allison, loss \$5000; Crown Oil Co., loss \$3000; George Carden, loss \$2550; Heywood Oil Co., loss \$4000; Little & Mitchell, loss \$500; Paraffine Oil Co., loss \$500.

Bowling Green, S. C.—Flannagan & Co.'s cotton gin.

Cape Charles, Va.—Peter Bender's saw, planing and grist mills; loss \$7000.

Chaires, Fla.—Patterson Bros.' cotton gin.

Hartwell, Ga.—A. J. McMullan's cotton gin.

Inda, Miss.—Lott & Perkins' dry-kilns; loss \$13,000.

Kaplan, La.—Rushmore Planters' & Irrigation Co.'s warehouse.

Memphis, Tenn.—Standard Wheel Co.'s plant; loss \$10,000; J. E. Blankenship, manager.

Mountville, S. C.—John W. Simmons' cotton gin; loss \$3500.

Newnan, Ga.—Water-power mill belonging to estate of T. G. Burbee, Sr.; loss \$2500.

Pearson, Ga.—Jeff Kirkland's turpentine still; loss \$1200.

Pensacola, Fla.—Stratton Ice Works damaged by boiler explosion.

Pittsburg, N. C.—Saw-mill of B. Nooe, Jr.; loss \$2000.

Port Hudson, La.—Sugar mill of W. S. Slaughter, Jr.; loss \$20,000.

Shenandoah, Va.—Lucas Building, Kaufman Hotel, Brown Hotel, Wanamaker Building, Wyant Building.

Statesboro, Ga.—Bulloch County Oil Mill's cotton gin; loss \$6000.

Unadilla, Ga.—J. A. & D. I. King's planing mill; loss \$50,000.

Vidalia, La.—Cotton gin owned by Brown & Learned of Natchez, Miss.; loss \$4900.

Woodruff, S. C.—J. W. & D. W. Anderson's cotton gin; loss \$1000.

Wylie, Texas.—H. R. Raney's cotton gin.

Wytheville, Va.—Hancock Hotel, owned by John C. and C. H. Brady; loss \$8000.

Youngs, S. C.—W. P. Harris' cotton gin; loss \$1200.

BUILDING NOTES.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Albertville, Ala.—Bank Building.—New bank organized with Hogan Jackson, president, will erect brick bank building.

Anson, Texas.—School Building.—City will erect \$10,000 school building. Address The Mayor.

Atlanta, Ga.—Warehouse.—Robert S. Armstrong & Bro. contemplate erecting machinery warehouse.

Barnesville, Ga.—Office Building.—M. W. Smith will have plans prepared for office building.

Big Sandy, Texas.—College Building.—Independent School Board, J. P. Hart, president, will erect brick college building at a cost of \$6000.

Charleston, W. Va.—Fire Stations.—W. D. Isaacs, Joel Cottrell and T. G. Fletcher, building committee, will open bids October 18 for the erection of two fire-engine houses. Plans and specifications can be seen at the office of George Henneman, architect. Usual rights reserved.

Charlotte, N. C.—Dwelling.—R. L. Durham has purchased site on which to erect residence.

Crawfordville, Fla.—Jail Building.—Commissioners of Wakulla county have let contract for proposed jail building; structure to be two stories, of brick, and cost \$4500.

Columbia, Miss.—Courthouse.—Board of Supervisors of Marion county have ordered an election held November 8 to vote on the \$50,000 bond issue previously reported for the erection of courthouse. L. C. Wellborn is clerk.

Columbia, Tenn.—Store Building.—A. B. Rains has let contract to Jim Sladen for the erection of store building to replace structure reported burned last month at a loss of \$20,000.

Dallas, Texas.—Building.—National Benevolent Association of the Christian Church has let contract to Morris & Watkins for the erection of two-story brick veneer building, 62x75 feet, costing \$10,000, at the Juliet Fowler Orphanage.

Edna, Texas.—Courthouse.—Jackson county contemplates issuing \$50,000 of bonds for the construction of courthouse. Address County Judge.

Fredericksburg, Va.—Dwelling.—Frank Beckwith has let contract to Frank P. Stearns for the erection of residence.

Gainesville, Fla.—Hospital.—Dr. J. Harrison Hodges will erect hospital.

Greenville, Miss.—School Building.—Chas.

Pearce of Indianapolis, Ind., has contract at \$26,000 for the erection of school building previously reported.

Greenwood, Miss.—Courthouse.—Board of Supervisors of Leflore county has adopted plans and specifications by R. H. Hunt, Chattanooga, Tenn., for the erection of proposed \$68,000 courthouse.

Halifax, N. C.—Hotel.—Dr. H. B. Furgeson contemplates erecting hotel.

Halifax, N. C.—Store Building.—J. F. McMahon will erect two-story brick store building, 38x100 feet.

Hartsville, Tenn.—Courthouse.—A committee has been appointed and authorized to purchase additional ground for rebuilding Trousdale county's courthouse, previously reported burned at a loss of \$10,000. Address Trousdale County Commissioners.

Hattiesburg, Miss.—Courthouse.—McGee & Garber, 100 President street, Jackson, Miss., have contract to erect \$50,000 courthouse for Perry county, previously reported.

High Point, N. C.—Hotel.—Incorporated: Elwood Hotel Co., with an authorized capital of \$10,000, by Dred Peacock, W. G. Bradshaw and W. H. Plummer.

Hot Springs, Ark.—Courthouse.—Garland county contemplates erecting courthouse. Address County Judge.

Huntington, W. Va.—Dwelling.—W. L. Andrews has let contract to contractor Fawcett for the erection of his proposed residence.

Huntington, W. Va.—Postoffice.—Plans and specifications have been distributed from the office of James Knox Taylor, supervising architect, Washington, D. C., for postoffice after plans and specifications by Parker & Thomas, architects, 1 Somerset street, Boston, Mass., and 612 North Calvert street, Baltimore, Md. Structure to be three stories high with basement, 63x94 feet; granite base; buff limestone or sandstone exterior; concrete foundation; reinforced concrete floors; slag roofing; copper skylights; steel construction fireproofed with terra cotta; electric wiring and fixtures; sanitary plumbing; steam-heating system. Electric-light plant, gas and electric fixtures are not included in contract. Kendrick & Roberts, Inc., 216 North Liberty street, Baltimore, Md., are among those submitting estimates on the construction. Bids to be in October 25.

Huntsville, Ala.—Business Block.—Love & Cowell are preparing plans for business block reported last week to be erected by S. L. Terry & Bro.; to be 52x137 feet, fireproof construction, hot-water heating, electric and gas lights, and cost about \$16,000.

Kansas City, Mo.—Flats Building.—Emily C. Kendall will erect three-story brick flats building 40x117 feet, costing \$22,000.

Kansas City, Mo.—Warehouse.—Joseph Becker has contract for five-story warehouse 72x142 and costing \$40,000, previously reported to be erected by M. H. Hudson. Shepard & Farrar prepared the plans.

Kansas City, Mo.—Business Blocks.—Thos. Lafferty is arranging for the erection of two business blocks.

Lake Charles, La.—Hotel.—Majestic Hotel Co. has let contract to Spear & Hansen of Chicago, Ill., at \$30,000 for installing steam-heating, plumbing, gasfitting, engines, generators, electric-light and telephone systems in four-story brick hotel which is being erected by Contractors Maginalls & Reimers.

Lake Village, Ark.—Bank Building.—M. E. Dundy has contract to erect two-story hydraulic pressed brick building 32x60 feet, costing \$5000, for the Bank of Lake Village, reported last week. H. J. Harker of Paragould, Ark., prepared the plans.

Laurel, Miss.—Business Buildings.—Frank Gardner will erect three brick buildings.

Lawrenceburg, Tenn.—Courthouse.—Lawrence county has under contemplation the erection of courthouse, and a committee has been appointed to take the matter in charge. Address County Judge.

Lewisburg, Tenn.—Jail Building.—Marshall county contemplates erecting jail building, and a committee has been appointed to select site. Address County Judge.

Little Rock, Ark.—Medical Building.—Geo. R. Mann and others will organize the Medical Building Co. to erect three-story office building 50x140 feet, costing \$50,000, to be used by physicians, dentists, etc.

Little Rock, Ark.—Business Building.—Lasker Bros. are having plans prepared by Frank Gibb for the erection of three-story building at 518-520 Main street.

Louisville, Ky.—Church.—St. Luke's German Evangelical Church contemplates erecting edifice; Wm. F. Werhelm, pastor.

Louisville, Ky.—Church.—Congregation of the German Evangelical St. Paul's Church has secured site on which to erect \$50,000 edifice. Address The Pastor.

Lumberport, W. Va.—Business Building.—Lumberport Building & Development Co. is erecting bank, opera-house and lodge building, for which Holmboe & Lafferty of Clarksburg, W. Va., were reported as preparing plans; structure to be two stories, 50x100 feet, ordinary construction, and cost about \$10,000. C. L. Hess will superintend the construction.

McMechen, W. Va.—School Building.—Board of Education of Union district, Chas. I. Evans, Benwood, W. Va., secretary, has ordered an election to be held in November to vote on the issuance of \$35,000 of bonds for the erection of school building. C. D. McCarty of Wheeling, W. Va., will prepare plans and specifications.

Memphis, Tenn.—Store Building.—G. M. Shaw & Pfall are preparing plans for Mrs. Ida M. Stewart's proposed five-story brick store building 30x282 feet.

Miami, Fla.—Store and Office Building.—H. P. Scott has contract to erect Roth Building, reported last week; structure to be two stories, 50x70 feet, and cost \$6000. Walter C. DeGarmo prepared the plans.

Mobile, Ala.—Jail Building, etc.—Mobile county will vote November 8 on the issuance of \$200,000 of bonds for the erection of jail, improving property at Royal and Church streets for public offices and improving and enlarging the poor asylum. Address W. H. Holcombe, president Board of Revenue and Road Commissioners.

Monroe, Ga.—School Building.—The mayor states there is no truth in the report mentioned last week that the city would erect school building.

Mount Airy, Md.—Bank Building.—Mount Airy State Bank will erect two-story bank building with granite front. Jesse H. Prather is president.

Mt. Airy, Md.—Bank Building.—First National Bank will erect bank building. A. W. Hall can be addressed.

Nashville, Tenn.—Store Buildings.—C. A. Litterer will erect five brick store buildings at a cost of \$4000.

Norfolk, Va.—Apartment-house.—Chartered: Merrimac Corporation, with \$25,000 capital, and Charles N. Whitehurst, president; C. A. Woodard, vice-president, and T. B. Gordon, secretary-treasurer. Company has secured site and is having plans prepared by Ferguson & Calrow for the erection of five-story brick and stone apartment-house to cost \$40,000. Mr. Whitehurst was reported last week as organizing company to erect apartment-house.

Pensacola, Fla.—Dwellings.—Architect Frederic has prepared plans for residences for E. H. Skinner and F. C. Brent.

Purvis, Miss.—Courthouse.—Lamar county contemplates erecting \$45,000 courthouse. Address J. B. Treen, president Board of Supervisors.

Raleigh, N. C.—Masonic Temple.—Masonic Temple Construction Co. is having plans prepared by Chas. K. Bryant of Charlotte, N. C., for the erection of six-story Masonic temple 60x88 feet, of semireproof construction, and costing \$100,000.

Spartanburg, S. C.—Gymnasium.—J. P. Hertzog has contract to erect proposed gymnasium building for the Y. M. C. A.; structure to be two stories, of brick, 40x500 feet.

Springfield, Tenn.—Depots.—It is reported that the Louisville & Nashville Railroad Co. will expend \$2050 in enlarging the present depot for freight purposes and erect passenger station at a cost of \$3500. R. Montfort is chief engineer, Louisville, Ky.

St. Louis, Mo.—Store Building.—Globe Shoe & Clothing Co. has purchased site on which to erect seven-story addition. Maurice Landau is president.

Tampa, Fla.—Building.—Joseph Mizell has purchased site on which to erect two-story brick building 105x140 feet.

Temple, Texas.—Business Block.—A. Lee Brown has purchased site on which to erect business block.

Tifton, Ga.—School Buildings.—City will vote November 15 on the issuance of \$15,000 of bonds for the erection of proposed school buildings. Address The Mayor.

Tupelo, Miss.—Business Building.—Tupelo Mercantile Co. reported incorporated last month with \$50,000 capital, is having plans prepared by J. A. Dobbs for the erection of three-story building 60x145 feet.

Tuscaloosa, Ala.—Jail Building.—Thomas & Galligan, Birmingham, Ala., have contract at \$241 for the erection of jail building previously reported.

Waco, Texas.—School Buildings.—City has voted affirmatively the issuance of \$50,000 of bonds for school buildings. Address The Mayor.

Washington, D. C.—Warehouse.—Harding &

Upman have prepared plans for Earnshaw & Leary's proposed warehouse; structure to be three stories, 45x100 feet, of hard-burned brick with galvanized-iron trimmings.

Washington, D. C.—Dwellings.—J. F. McCormick has purchased site at Petworth on which to erect 10 two-story houses, for which plans are being prepared by the N. T. Haller Company.

Washington, D. C.—Dwelling.—W. Duncan McKim of Morristown, N. J., has purchased site on which to erect residence.

Washington, D. C.—Laboratories.—The United States Department of Agriculture will erect two laboratories after plans and specifications by Rankin, Kellogg & Crane, architects, 1012 Walnut street, Philadelphia, Pa. Structure to be four stories high with attic and basement, 60.3x254.5 feet; granite base; white marble exterior; steel construction fireproofed with terra-cotta; tile roofing; sanitary plumbing. Heating apparatus, elevators, electric wiring and conduit systems not included in contract. Plans and specifications may be obtained by the deposit of a certified check of \$250 upon application to Capt. John S. Sewell, Corps of Engineers, Department of Agriculture, Washington, D. C. Bids to be in 2 P. M. November 10.

Willacoochee, Ga.—School Building.—Town has voted the issuance of \$6000 of bonds for the erection of proposed brick school building. Address The Mayor.

Wilmington, N. C.—Hotel.—W. J. Moore of Charlotte, N. C., will erect 100-room hotel at Wrightsville Beach to be known as the Atlantic View Hotel.

RAILROAD CONSTRUCTION.

Railways.

Augusta, Ga.—C. S. Wright is reported to have finished the survey for the Augusta & Elberton Railway as far as Lincolnton, more than half the way. The contract will probably be let in sections. President C. B. Young is reported as saying that several propositions looking to financing the line have been received.

Baltimore, Md.—The Baltimore & Ohio Railroad, it is reported, will build seven sidings, each 1600 feet long, at Buckhannon, W. Va.

Biloxi, Miss.—W. A. White of Biloxi has been granted an extension of charter to build an electric railway along the coast.

Blue Ridge, Ga.—The Tennessee, Georgia & South Carolina Railway has, it is reported, made application in Whitfield county, Georgia, for a charter with \$3,000,000 capital. It proposes to build a railway from Clayton, Rabun county, Georgia, to Ducktown, Tenn., and thence to Chattanooga. It will connect Clayton, Hiwassee, Young Harris, Blairsville, Morganton, Mineral Bluff, Varnell and Ringgold, Ga., and Ducktown and Chattanooga, Tenn. It will be about 200 miles long. The incorporators are W. B. Frink, J. D. Cameron, E. N. Frink and D. J. Haynes of New York City, J. A. Jones, G. W. McAfee, E. N. Butt, Wm. M. Wilson, J. B. McKenney and Merrell Skinner of Blue Ridge, Ga.

Bluffton, Ga.—Dr. P. H. Thompson in a letter to the Manufacturers' Record confirms the report that plans are under consideration for a railroad from Blakely and Bluffton to Dawson, Ga.

Bonham, Texas.—Engineers are reported to be making a permanent survey for the proposed Bonham & McKinney Electric Railway.

Carrizo Springs, Texas.—The Nueces Valley, Rio Grande & Mexico Railway is reported chartered, and J. L. Zachery is to make a survey from Carrizo Springs, about 40 miles, to connect with the International & Great Northern Railroad. N. M. Lee is president and W. A. Squires is vice-president. It is stated that the contract for the first 20 miles is already let to Ward & Lee, and they are to begin work as soon as the survey is finished.

Cleburne, Texas.—Col. B. P. McDonald, president of the Dallas, Cleburne & Southwestern Railway, is quoted as saying that the line will be extended to Glenrose, Lampasas and other points. W. D. Myers is general manager.

Columbus, Ga.—President W. Miller Gordon of the proposed Birmingham, Columbus & St. Andrews Railway is reported as saying that construction is progressing steadily between Chipley, Fla., and St. Andrews Bay, and that soon five miles of track will be completed.

Conway, S. C.—Tracklaying on the extension of the Conway, Coast & Western Railway to Marion is reported under way. F. A. Burroughs and others are interested.

Cumberland, Md.—B. W. Wright and others are reported interested in a plan to build an

electric railway from Keyser, W. Va., to Petersburg, W. Va., about 30 miles.

Enid, O. T.—John Overholt, general superintendent of the Denver, Enid & Gulf Railway, is quoted as making the announcement that the road has been purchased by the Missouri, Kansas & Texas Railway. The line is now 57 miles long from Guthrie to Enid, and an extension is being built from Enid to Kiowa, Kan.

Fayetteville, W. Va.—The Rock Lick & Wolf Creek Valley Railroad Co. of Fayetteville has been chartered to build a line from the mouth of Rock Lick creek on Arbutus creek to Wolf Creek valley, connecting with the Deepwater Railway on Lower Loup creek. The incorporators are J. M. Richards, A. D. Smith, Jr., C. A. Goddard, S. T. Carter, C. W. Osenton of Fayetteville, W. Va.

Fort Smith, Ark.—The Mount Mena Traction Co. has been organized to build an electric line from Rich Hill, on the Kansas City Southern, to Mount Mena, and the line is to be ready for operation by next summer. The incorporators are James L. Hale, E. J. Mills, G. H. Little and G. B. Noble. Alfred T. Bissell is president; E. J. Mills, vice-president, and James L. Hale, secretary and treasurer.

Fairmont, W. Va.—The Fairmont & Clarksburg Traction Co. has, it is reported, finished one mile of grading on its Grasselli extension, where 100 men are at work.

Fayetteville, Ark.—It is reported that the route has been surveyed for the Loop Creek Railroad's two-and-one-half-mile extension from Macdonald to the coal properties of the Snyder Colliery Co. and Price Hill Colliery Co., and that the road will be built as soon as condemnation proceedings are settled.

Fort Smith, Ark.—The Midland Valley Railroad is reported to have been granted permission to extend its line about 75 miles from a point at or near Boles, Scott county, to the southern boundary of Montgomery county. F. A. Molitor is chief engineer. The directors are C. E. Ingersoll, Henry Talvill, E. B. Morris, Wm. H. Jenks, F. A. Molitor, F. Bache, J. W. McLoud, A. W. Lefebvre and J. R. Startzell.

Gadsden, Ala.—It is reported that surveys are in progress and rights of way being obtained for the proposed railroad from Odenville, in St. Clair county, to Gadsden, in Etowah county.

Kingsville, Texas.—The projected extension of the St. Louis, Brownsville & Mexico Railway will, it is reported, be made from either Robstown or Sinton, probably the latter. F. G. Jonah, chief engineer, is said to be making the survey.

Little Rock, Ark.—A number of business men are reported to be working on a plan to build a railroad north from Little Rock, and negotiations may soon be opened up with a railroad contractor. Geo. B. Brown, secretary of the Board of Trade, may be able to furnish further information.

Madisonville, Ky.—It is reported that final surveys have been made from Madisonville to Central City, Ky., 26 miles, for the Kentucky Midland Railroad, and grading is to begin immediately. M. M. Wheeler is chief engineer, Madisonville, Ky., and P. J. Jennings, president, Home Insurance Building, Chicago, Ill.

Marshall, Texas.—H. L. Hull, vice-president of the proposed Gulf, Texas & Northern Railroad, writes the Manufacturers' Record confirming the report that the company has been incorporated to build a line from the Gulf of Mexico, near Sabine Pass, to Oklahoma City, O. T.

Marietta, Ohio.—Gen. A. J. Warren of Marietta, president of the Crown Mountain Gold Mining Co. of Lumpkin county, Georgia, and Ohio capitalists will, it is reported, complete the Gainesville & Dahonega Railroad by building 10 miles of line from Leathers Ford to Dahonega, Ga. Col. W. P. Price of Dahonega is also said to be interested.

Nashville, Tenn.—It is reported that work is being pushed on the new freight yard at Chattanooga for the Nashville, Chattanooga & St. Louis Railway. The yard will cover about 45 acres of ground, the tracks varying in length from a fourth to three-fourths of a mile. H. McDonald is chief engineer at Nashville.

Nashville, Tenn.—Mr. W. N. McDonald, chief engineer Tennessee Central Railroad, writes the Manufacturers' Record denying the report that the company would construct several branch lines in Christian county, Kentucky.

New Orleans, La.—Mr. E. B. Cushing, general superintendent of the Louisiana Western Railroad Co. (Southern Pacific system), writes the Manufacturers' Record that a survey for the change in the main line of the Galveston, Harrisburg & San Antonio Railway between Etholn and Fabens, in El Paso

county, Texas, is about 42 miles long, shortening the line about nine miles. It is not expected to construct the line immediately.

New Orleans, La.—Contractors for the proposed Morgan City & New Iberia Electric Railway are reported to be preparing estimates, and Gen. F. F. Myles of this city is quoted as saying that construction will begin soon.

Norfolk, Va.—The Norfolk & Portsmouth Belt Line Railway is reported to be considering a plan to build an extension from Berkeley to Norfolk and Sewells Point. George S. Shafer is superintendent.

Norfolk, Va.—President E. A. Buell of the Norfolk County Timber Corporation writes the Manufacturers' Record that the company is now grading for a three-foot logging road which will extend from the Southern branch of the Elizabeth river at Norfolk to the Northwest river. The line will have about 10 miles of track.

Offerman, Ga.—The Southern Pine Co. writes the Manufacturers' Record denying the press report that it has leased its railroad between Broxton and Hazlehurst to a company which would make it a common carrier.

Okmulgee, I. T.—In a letter to the Manufacturers' Record Fred H. Smith, president of the Kansas, Okmulgee & Gulf Railroad Co., writes the Manufacturers' Record that the road has not yet been definitely located through Indian Territory, so far as the towns are concerned, except Okmulgee. The line will cross the Frisco and the Missouri Pacific at or near Claremore, I. T., and will run thence in a nearly northerly direction to the Kansas line. South from Okmulgee it will cross the Choctaw, Oklahoma & Gulf and the Missouri, Kansas & Texas railroads at or near South McAlester, I. T. W. E. Wood, secretary, is reported as saying that construction is expected to begin about January 1 next.

Port Arthur, Texas.—Judge Mentz and others are reported to be working on a plan to build the Gulf, Mentz & Lake Charles Railroad to connect Lake Charles, La., with the head of Sabine Pass. A branch 16 miles long to Orange, Texas, is proposed.

Portsmouth, Va.—It is reported that the Seaboard Air Line proposes to construct a system of terminals near the Hillsboro river, Florida, costing \$300,000, as soon as deep water is assured at Tampa. W. W. Gwathmey, Jr., is chief engineer. He writes the Manufacturers' Record that these proposed plans "are based on our securing option on an island with the view to taking up the question of terminals, in case provision is made for deep water at this point. This is as far as the matter has gotten."

Princeton, W. Va.—The Mercer Electric Railway Co. of Princeton is reported incorporated to build a line from Bluefield to Athens, about 15 miles. The incorporators are James Scott, W. C. Hedrick, J. E. T. Sentz, G. P. Damewood and T. H. Holt, all of Princeton.

Searcy, Ark.—Construction of the Searcy & Des Arc Railroad (Rock Island system) is progressing. About three miles are completed, and tracklaying is being finished at the rate of about two miles a day. This line will connect with the Memphis branch at Mesa, three miles west of De Vall's Bluff.

Sherman, Texas.—Louis Dumas is reported as saying that there is a movement under way to build an electric railway from Sherman via Cannon to connect with the proposed line that is to be built between McKinney and Bonham.

St. Louis, Mo.—The St. Louis, Iron Mountain & Southern Railroad (Missouri Pacific system) is reported to have awarded a contract to the Dalhoff Construction Co. of Little Rock, Ark., to build a line about 160 miles long from a point near Gurdon, Ark., to Greenwood, Ark. It will be called the Gurdon & Fort Smith Railroad. Engineers are in the field. Twenty miles of line are reported already built from Gurdon to Pike City. Work has been in progress for some time near Caddo Gap.

St. Louis, Mo.—The Garland Western Railroad has been granted an extension of time, it is reported, for the construction of its line from Hot Springs, Ark., to a point in the center of Montgomery county, 50 miles. Col. S. W. Fordyce of St. Louis, Mo., is president, and H. E. Martin, secretary.

St. Louis, Mo.—The press report that the Missouri Pacific Railway had let a contract to Hammond & Jeffries for 104 miles of construction, including seven tunnels and much heavy work, is pronounced to be without foundation by Chief Engineer H. Rohwer in a letter to the Manufacturers' Record.

St. Louis, Mo.—The Mobile & Ohio Railroad is reported to be surveying between Gulfport, Pascagoula and Biloxi, Miss., for an

extension. T. L. Condon is consulting engineer at St. Louis.

Sylva, Ark.—Mr. A. A. Webber informs the Manufacturers' Record that the construction of a railroad from Buffalo City up the Buffalo river beyond the mouth of Rush creek is being advocated for the purpose of developing zinc territory. Such a line could also be built from Winnerva.

Tyler, Texas.—The St. Louis Southwestern Railway will, it is reported, build terminals on the north side of the Arkansas river, opposite Little Rock, Ark. M. L. Lynch is chief engineer at Tyler, Texas.

Van Wert, Ohio.—The Cincinnati, New Orleans & Texas Pacific Railroad will, it is reported, spend \$100,000 for the purpose of enlarging its yards at Citico, Tenn. W. D. Williams is chief engineer at Van Wert, Ohio.

Waco, Texas.—Mr. Charles Hamilton, vice-president and general manager Texas Central Railroad, writes the Manufacturers' Record that there is no truth in the report that the company may build an extension from Stamford to Amarillo.

Washington, D. C.—The Southern Railway will, it is reported, double-track its belt line into the new station at Atlanta, Ga. W. H. Wells is engineer of construction at Washington, D. C.

Wheeling, W. Va.—The Wheeling & Western Traction Co., it is reported, will have its line finished from Pasco to Barton in three weeks. The new line will be eight miles long from Bridgeport.

Winchester, Va.—The Winchester & Washington Electric Railroad Co. has selected Henry A. Pressey of Washington, D. C., as engineer. He will begin the survey immediately.

Woodville, Miss.—The Woodville-Fort Adams Electric Railroad Co., which proposes to build a line 23 miles long, has received a favorable report on its plan from George W. Borde of New Orleans, the consulting engineer. The company has elected officers as follows: L. T. Ventres, president; Charles Cohen, vice-president; W. H. Woods, secretary; James H. Sessions, treasurer.

Street Railways.

Chattanooga, Tenn.—It is reported that the Rapid Transit Co. will be asked to change its Rossville line so as to reach East Lake.

Kansas City, Mo.—An ordinance requiring the Metropolitan Street Railway Co. to extend its Jackson-avenue line has passed the upper branch in the city council.

Kansas City, Mo.—The Kansas City & Bonner Springs Railway Co. is reported to have begun construction on its proposed suburban line. T. J. O'Donnell is the contractor. John W. McDaniell is president; W. H. Smith, secretary.

Knoxville, Tenn.—The Knoxville Traction Co., it is reported, will build an extension of one and one-eighth miles on the Sevierville pike. The Euclid-avenue extension is also to be completed, and under the franchise granted by the county court the line to be built on the Merryville pike must be constructed within two years. C. H. Harvey is president of the company.

Nashville, Tenn.—It is reported that the Nashville Railway & Light Co. has been granted rights of way for the extensions on the Nolensville turnpike and Murfreesboro turnpike extensions and the Jefferson-street line to 8th street, in West Nashville. Engineers are at work on the survey. President Warner is quoted as saying that work would begin within a few months.

Norfolk, Va.—The Norfolk Railway & Light Co. has been granted authority to extend its tracks on Brambleton avenue to Ohio creek.

Ocala, Fla.—Robert L. Martin and associates are reported to have filed a petition for a franchise for the Florida Traction Co., which proposes building and operating an electric railway in Ocala.

Philadelphia, Pa.—C. H. S. Littleton, Hotel Tracy, 36th and Chestnut streets, and Edward E. Mandeville, also of Philadelphia, are reported interested in a plan to build an electric railway and a light plant at St. Augustine, Fla.

Messrs. Hammacher, Schlemmer & Co.

It will doubtless interest many in the trade to know that Messrs. Hammacher, Schlemmer & Co. of New York city have removed their offices and warehouse to Fourth avenue and 13th street. The firm's business in hardware, tools, supplies and piano materials has become so large and continues to increase so steadily that this removal to large quarters became absolutely necessary. Buyers are invited to visit the new establishment. Hammacher, Schlemmer & Co. have been continuously supplying the demand in their line since 1848.

MACHINERY, PROPOSALS AND SUPPLIES WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—See "Machine Tools."

Air Compressor.—Emerson, Marlow & Co., 87 South Water street, Chicago, Ill., are in the market for 15-ton compressor.

Asphalt Machinery.—A. T. Hamilton, Oklahoma City, O. T., wants to correspond with parties regarding asphalt machinery for refining purposes and saving by-products.

Bakery Equipment.—Louisiana Hospital, E. T. Elam, contractor, Alexandria, La., will be in the market for rotary bake ovens and steam ranges.

Bathrooms.—See "Plumbers' Supplies."

Boilers.—See "Furniture-factory Equipment."

Boilers.—City of Little Rock, Ark., is in the market for boilers for electric-light plant. Address John W. Bleidt, superintendent.

Boilers.—See "Paper and Pulp Machinery."

Boilers.—See "Water-works Equipment."

Bridge Construction.—G. W. Prine, clerk, Stateville, Ga., will receive sealed bids until November 8 for the construction of steel bridge over the Alapaha river, near Stateville. Plans and specifications can be seen at Commissioners' office, Stateville; usual rights reserved.

Bridge Construction.—G. E. Maddox, clerk, Rome, Ga., will open bids November 7 for the construction of wooden bridge across Little Cedar creek, near Witzell ford, in accordance with plans and specifications which can be seen at office of clerk or of Board of Commissioners of Floyd county, Rome, Ga.; usual rights reserved.

Bridge Construction.—Sealed bids marked "Proposals for Sweetser Bridge" will be received by the County Commissioners, Annapolis, Md., until November 1 for the construction of an iron bridge over the Patapsco river at or near the site of the present wooden structure known as Sweetser Bridge. Certified check for \$1000 must accompany each bid. Plans and specifications may be seen and blanks for proposals obtained at the office of the County Commissioners, Towson, Md., and at Annapolis, Md.; usual rights reserved.

Broom Machinery.—B. F. Gasque, Dillon, S. C., wants addresses of manufacturers of broom machinery.

Building Equipment.—Memphis Motor Carriage Co., Memphis, Tenn., is in the market for building equipment.

Building Equipment and Supplies.—Lumberport Building & Development Co., Lumberport, W. Va., wants prices on roofing, plaster, lumber, etc.

Building Equipment and Supplies.—Emerson, Marlow & Co., 87 South Water street, Chicago, Ill., are in the market for architectural iron.

Building Equipment and Supplies.—Dr. J. Harrison Hodges, Gainesville, Fla., wants prices on building equipment and supplies.

Building Equipment and Supplies.—Tupelo Mercantile Co., Tupelo, Miss., wants bids on iron work, store glass, office fixtures, etc.

Building Equipment and Supplies.—McGee & Garber, 109 President street, Jackson, Miss., are in the market for fireproofing and marble wainscoting, tile floors, etc.

Castings.—See "Foundries."

Cement.—See "Water-works Equipment."

Concrete Mixer.—Maryland Equipment & Supply Co., 310 St. Paul street, Baltimore, Md., is in the market for second-hand continuous concrete mixer, capacity 75 to 100 yards per day (without engine or boiler).

Cotton-gin Equipment.—J. P. Brown, Helena, Texas, wants complete equipment for cotton gin.

Cotton-mill Machinery.—Bhupati Nath Bhoose, 77, Sitaram Ghose's street, Calcutta, India, wants information regarding the manufacture of bookbinding cloth, together with catalogues and prices on the machinery required.

Cranes.—See "Machine Tools."

Decalcomanias.—Georgia Coffin Co., Ninth avenue and 11th street, Columbus, Ga., wants addresses of manufacturers of paper transfer in sheets for graining (oak, walnut, mahogany, etc.) coffins, caskets.

Dynamometers.—Tupelo Mercantile Co., Tupelo, Miss., wants bids on dynamometers.

Electrical Equipment.—See "Furniture-factory Equipment."

Electrical Machinery.—See "Paper and Pulp Machinery."

Electric-light Plant.—See "Lighting Plant."

Electric-light Plant Equipment.—See "Boilers."

Elevator.—Tupelo Mercantile Co., Tupelo, Miss., wants bids on elevator.

Elevator.—Emerson, Marlow & Co., 87 South Water street, Chicago, Ill., are in the market for freight elevators.

Engine.—E. R. Mathis, West Point, Va., is in the market for 20-horse-power engine. (See "Water-works Equipment.")

Engine.—Tupelo Mercantile Co., Tupelo, Miss., wants bids on engine.

Engine.—Memphis Motor Carriage Co., Memphis, Tenn., is in the market for gasoline engine.

Engine.—George S. Moore, Pittsboro, N. C., is in the market for a 2½-horse-power gas, gasoline or kerosene engine to be used in blacksmith shop.

Engine.—See "Machine Tools."

Engine.—W. J. Rice Lumber Co., McMinnville, Tenn., wants prices on 10-horse-power engine. (See "Woodworking Machinery.")

Engines.—See "Furniture-factory Equipment."

Engines.—See "Paper and Pulp Machinery."

Engines.—Emerson, Marlow & Co., 87 South Water street, Chicago, Ill., are in the market for gas engines.

Excelsior Machinery.—G. A. Inman & Co., Room 11, Times-Dispatch Building, Richmond, Va., wants addresses of manufacturers of excelsior machines.

Fire Extinguishers.—Proposals will be received until November 8 at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., for furnishing at the navy-yards, etc., Norfolk, Va., Charleston, S. C., Key West, Fla., Portsmouth, N. H., and New York, N. Y., as specified, a quantity of fire extinguishers. Blank proposals will be furnished on application to the several navy-yards or to the bureau; H. T. B. Harris, paymaster-general, U. S. N.

Forging Machine.—See "Machine Tools."

Foundries.—The Smith Automatic Box Machinery Co. (Inc.), 2330-32 East Main street, Richmond, Va., wants quotations on small steel castings and drop forgings.

Fountains.—Mrs. E. B. Heard and Mrs. A. S. Oliver, committee, Eatonton, Ga., want catalogues and price-lists of ornamental fountains for watering houses.

Furniture-factory Equipment.—Forsyth Furniture Co., Winston-Salem, N. C., is in the market for equipment for furniture factory, including boilers, engines, electrical equipment, etc.

Hardware.—Ruleville Hardware Co., Ruleville, Miss., wants catalogues of all kinds of hardware.

Hoisting and Conveying Equipment.—Palestine Ice, Fuel, Gin Co., Palestine, Texas, is in the market for complete outfit for handling coal from a shaft 600 feet, machinery to be delivered and set up ready for use.

Hullers.—See "Peanut Machinery."

Ice Plant.—Alfred Wolters, Schulenburg, Texas, will be in the market for equipment for 10-ton ice plant.

Ice Plant.—A. S. Lipscomb, Gaffney, S. C., wants addresses of makers of small ice plants suitable for hotels or small towns.

Iron Work.—See "Fountains."

Levee Work.—J. F. McIndoe, captain engineers, United States Engineer Office, 3232 Prytania street, New Orleans, La., will open bids October 17 for constructing about 151,000 cubic yards of earthwork in the Lafourche and Pontchartrain levee districts; information furnished on application.

Lighting Plant.—Kiesler Land Co., Perryville, Mo., wants small lighting plant.

Lumber.—Westbourne Coal Co., Gatlin, Tenn., is in the market for lumber. (See "Mining Equipment.")

Machine-shop Equipment.—Memphis Motor Carriage Co., Memphis, Tenn., is in the market for equipment for machine shop.

Machine Tools.—The E. M. Roberts Company, Ashland, Ky., is in the market for a second-hand (in good order) Bulldoser forging machine, size No. 3.

Machine Tools.—Sealed proposals will be

received until November 8 at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., for furnishing at the navy-yards, etc., Portsmouth, N. H.; Boston, New York, League Island, Norfolk and New Orleans, as specified, a quantity of machine tools, etc., comprising lathes, planers, bending and straightening rolls, expanding machines, cutting-off machines, engraving machine, band-sawing machine, punching machine, milling machines, shears, helve hammer, air compressor, deck winch, drill, drill presses, car-wheel press, motor drives for various machines, traveling cranes, locomotive crane, centrifugal pump, steam pump, valve pump, steering engine and coal cars. Blank proposals will be furnished on application to the several navy-yards or to the Bureau. H. T. B. Harris, Paymaster General, U. S. N.

Mining Equipment.—Westbourne Coal Co., Gatlin, Tenn., is in the market for machinery and equipment for mining coal.

Mining Machinery.—See "Hoisting and Conveying Equipment."

Paper and Pulp Machinery.—Elmer E. Weaver, engineer in charge of the Consumers' Boxboard & Paper Co., York Haven, Pa., wants prices on paper and pulp machinery, engines, boilers and dynamometers for paper plant, which is to be located in Baltimore, Md.

Paper-box Machinery.—J. J. Norris, 1128 South Main street, Anderson, S. C., wants to purchase machinery for making pasteboard boxes.

Peanut Machinery.—Wm. O'Connor, superintendent National Cotton Oil Co., Houston, Texas, wants addresses of manufacturers of peanut machinery, such as hullers, etc.

Piping.—See "Water-works Equipment."

Piping.—See "Water-works Equipment."

Piping.—See "Water-works Equipment."

Planing-mill Equipment.—Thomas J. Whaley, Berlin, Md., wants complete equipment for planing mill.

Plumbers' Supplies.—C. G. Varden, Red Springs, N. C., is in the market for 20 porcelain bathtubs.

Pulverizing Machinery.—W. A. Ragsdale, superintendent, 1009 Bayard street, Baltimore, Md., is in the market for a steel mill to grind or pulverize hard substances.

Pump.—See "Water-works Equipment."

Pump.—Alfred Wolters, Schulenburg, Texas, is in the market for new or second-hand Cook's deep-well pump with four-inch working barrel.

Pump.—Morris Improvement Co., Morris, Ala., is in the market for a pump capable of raising 25,000 gallons to a height of 75 feet through 4000 feet of eight-inch pipe. (See "Water-works Equipment.")

Pumping Engines.—Kiesler Land Co., Perryville, Mo., wants pumps and small engines for operating same, either hot-air or gasoline.

Pumps.—See "Machine Tools."

Pumps.—See "Water-works Equipment."

Railway Equipment.—Joseph E. Bowen, Atlantic Office Building, Norfolk, Va., is in the market for eight miles of 35 or 40-pound relaying rails.

Railway Construction.—Mariano Bermudez, Aulian, Jalisco, Mexico, wants information regarding railways for the exploitation of timber land, and estimates on the construction of such a line 80 kilometers long.

Railway Equipment.—The Supply Co., Ibernia Bank Building, New Orleans, La., is in the market for about five miles of 35-pound rails with splices; also eight miles of 56-pound or 60-pound rails with accessories.

Railway Equipment.—Norfolk County Timber Corporation, Norfolk, Va., will be in the market for 10 miles of 35 or 40-pound rail and other supplies and equipment for logging road.

Railway Equipment.—See "Machine Tools."

Railway Equipment.—See "Scales."

Refinery (Asphalt).—See "Asphalt Machinery."

Roofing.—See "Building Equipment and Supplies."

Roofing.—Rucker & Witten Tobacco Co., Martinsville, Va., wants addresses of manufacturers of flat iron or steel roofing.

Saw-mill Machinery.—Wallace Mayo Company, Berkeley, Va., wants log jack and drag saw; also complete outfit for cutting off shingle and stave bolts.

Seating.—See "Theater Equipment."

Scales.—Southern Grease Co., 6800-6900 Bienville street, New Orleans, La., is in the market for a second-hand railroad track scales.

Theater Equipment.—Lumberport Building & Development Co., Lumberport, W. Va., wants prices on opera-house furnishings.

Street Paving.—R. E. White, mayor, Austin, Texas, will open bids October 26 for fur-

nishing all material and labor necessary for paving Congress avenue from the State Capitol grounds to a point near the Colorado river with sheet asphalt, rock asphalt, vitrified brick or some combination of said material, consisting approximately of 30,000 square yards. Complete plans and specifications with forms of proposals and contract on file at City Hall, Austin, or at the office of John B. Hawley, consulting engineer, Fort Worth, Texas. Certified check for \$2000, payable to the mayor, must accompany each bid; usual rights reserved.

Tanks.—Richmond Oil Co., Inc., Richmond, Va., is receiving bids on two 8x30-foot or 10x30-foot cylindrical iron tanks.

Tiling.—See "Building Equipment and Supplies."

Water-works Equipment.—Charles C. Wilson, 1302 Main street, Columbia, S. C., wants equipment for boring artesian well, boilers, pumps, cast-iron pipe.

Tower and Tank.—See "Water-works Equipment."

Water-wheel.—Morris Improvement Co., Morris, Ala., is in the market for a turbine wheel to develop 50 horse-power under 12-foot head. (See "Water-works Equipment.")

Water-works.—Norman B. Morrell, secretary Knoxville Water-Works Commission, Knoxville, Tenn., will receive sealed bids, endorsed on face "Proposal for Water-Works," until October 28 for constructing system of water-works, or parts thereof, in accordance with plans and specifications on file in office of secretary of commission, Knoxville, and at office of Owen Ford, consulting and supervising engineer, 710 Security Building, St. Louis, Mo. Certified check in the sum of 3 per cent. of amount of bid must accompany each bid, made payable to the treasurer of the Water-Works Commission. Usual rights reserved.

Water-works Equipment.—E. R. Mathis, West Point, Va., is in the market for 20-horse-power engine, 6½x10 triplex pump, 102-foot tower, 65,000-gallon cypress tank, 300 tons cast-iron pipe, 30 cars terra-cotta pipe, two cars cement.

Water-works Equipment.—Morris Improvement Co., Morris, Ala., is in the market for a turbine wheel to develop 50 horse-power under 12-foot head, pump capable of raising 25,000 gallons to a height of 75 feet through 4000 feet of eight-inch pipe, piping, etc.

Well-drilling Machinery.—See "Water-works Equipment."

Woodworking Machinery.—Carpenter, Taylor & Co., Rutherfordton, N. C., want to buy a second-hand double planer and matcher.

Woodworking Machinery.—Norfolk Hardwood Co., Norfolk, Va., is in the market for a three or four-saw trimmer, second-hand.

Woodworking Machinery.—W. J. Rice Lumber Co., McMinnville, Tenn., wants prices on mortiser, tenoner, molder; second-hand in good condition preferred.

Woodworking Tools.—Memphis Motor Carriage Co., Memphis, Tenn., is in the market for woodworking tools, etc.

MEXICO.

Railways.

Cement Works.—It is stated that Henry Smith, representing a cement company, offices at San Antonio, Texas, is negotiating for cement lands near Durango, Mexico, intending to establish cement works there.

Cyaniding Plant.—B. Clark Wheeler of Zacatecas, Mexico, contemplates erecting plant for cyaniding ores, daily capacity to be 50 tons.

Electric-light Plant.—Carlos Navarro Mora of Guadalajara, Jalisco, has franchise for the establishment of electric-light plant at Lake Chapala.

Electric Plant.—Lic. Felipe Seljas has received concession to establish an electric plant in Ciudad Juarez, Mexico.

Mining Corporation.—The La Sociedad Mining Co. has been incorporated, with capital stock of \$1,000,000, for general mining purposes, by C. C. Patterson of Shawnee, O. T.; L. C. Pendell of Douglas, Ariz.; Joe S. Patrick, Fred Schoenfeld and O. L. Hudson of Oklahoma City, O. T.

Timber Lands.—A. B. Fall of El Paso, Texas, and W. C. Greene of Cananea, Sonora, Mexico, have purchased (for themselves and others) a tract of 2,500,000 acres of timber land in the State of Chihuahua. Price is reported at \$1,500,000.

Railways.

Steam Railroad.—The Parral & Durango Railroad Co. has amended its contract and is authorized to construct a railroad from Mina Nuevas to Guanaxi; also to build a line to Parral from the same point.

Steam Railroad.—Mr. Alexander B. Downes,

general manager of the San Jorge Bay & Eastern Railroad, writes the Manufacturers' Record that it is contemplated to continue the line to San Antonio and later to Magdalena; also that he is now on his way to London with a view to interest capital in the proposition. His address is 515 West 33d street, Los Angeles, Cal.

Steam Railroad.—It is reported that a railroad will be built in the State of Mexico to run from Toluca via Tenango and Tenancingo to near Zacualpan near the State line of Morelos. Another division will go from Toluca through the Sultepec and Tenascaltepec mining regions, and thence via Texcaltitlan to Tezupileo and the State line of Morelos. Engineers are said to be surveying the Sultepec line. Juan Ochoa Ramos, general manager of the company, is reported to be negotiating with Henkel Bros. of Toluca to purchase the Toluca & Tenango Railroad, proposing to build from each end of it. It is also reported that negotiations are in progress to acquire the railroad from Lerma to San Nicholas, owned by Ignacio de la Torre. German Roth & Co. of the Toluca Brewery

and Telesforo Garcia are said to be interested in the project, besides New York, Chicago and Detroit capitalists, including W. H. Salisbury, D. O. Arnold, J. H. Wrenn, J. B. Hollins, J. Stone and Sidney Witherbee. H. B. Hollins of New York is also mentioned in connection with the plan. The road will be about 150 miles long.

Steam Railroads.—H. C. Dougherty of Jesua Maria, Chihuahua, is reported as saying that plans have been made to build three railroads in the western part of that State to form a belt line. One of the roads, from Casas Grande to the Guerrero Basin, about 80 miles, is being located. Another will be from Minaca to Jesus Maria, and the third from Minaca to Guerra, the latter to be built by the Chihuahua & Pacific Railroad, of which C. L. Graves is general manager at the city of Chihuahua.

Tramways.—Concessions have been granted to Col. Antonio Ramos Cadena to build tramways in the town of Cananea, Chihuahua, and to Senor Julio Lopez Velarde and associates for tramways in the town of Aldama, Chihuahua.

Baltimore. This company installs passenger and freight elevators—hydraulic, electric, belt and hand. It reports the following contracts among its many orders: Two for Goldenberg Bros., four for Charles McCaul Company, four for Dr. Henry Berkley, two for Edward Barkell, two for Eaton estate, two for Harwood & Segreaves and one each for Viceri Fruit Co., Mrs. R. Dix, Sharpe & Bohme, Frank T. Kirby, Burnham & Wells, Louis Brown, R. H. Frazier & Son, Wylie & Son, J. F. Stuckert, Maryland Biscuit Co., C. Read & Co. and National Coconut Co. It will be noted that some of the most prominent constructors of buildings are among those awarding elevator contracts to the Maryland Company.

Southern Electrical Contracts.

There is continued activity in electrical construction work throughout the South. Many of the most important manufacturing industries, public buildings and other establishments have lately been contracting for electric-lighting equipment. W. H. Jenks, 617 East Main street, Richmond, Va., has been very successful in this line of activity. He is a general electrical contractor, and among the present orders on which he is working are the following: A plant at Fayetteville, N. C., for the Holt-Williamson Manufacturing Co., consisting of 632 32-candle-power lamps and generator, and at the Holt Cotton Mills 120 incandescent lamps and generator; at Alken, S. C., wiring 400 incandescent lights for a residence; at Durham, N. C., wiring and furnishing 75-kilowatt generator and eight motors, aggregating 100 horse-power, for the Imperial Tobacco Co.; at Big Island, Va., wiring 500 incandescent lights and generator; at Williamsburg, Va., for the Williamsburg Kaiting Mills—wiring for 300 16-candle-power lamps and generator; for the Union Theological University, Richmond, Va., wiring six buildings for 900 lights, and in the Bijou Theater, Richmond, Va., installing 3200 16-candle-power incandescent lights.

Economizing Labor in Factories.

To economize in labor costs is one of the main desiderata in the conduct of manufacturing plants. Experienced men have found that this is one of the principal features—in many instances the principal feature in effecting good dividends. The mill and labor-saving machinery made by the C. O. Bartlett & Snow Company of Cleveland, Ohio, is widely known for its effectiveness wherever used. The company is constantly receiving orders from the most important and careful buyers. It reports the following recent sales: Buckeye Reduction Co., Findlay, Ohio, one Triumph steam dryer; S. Mendelson, Elyria, Ohio, one Triumph steam dryer; Binns Re-tarder Co., Uhrichsville, Ohio, one Triumph steam dryer; Daniel H. Grandin, Jamestown, N. Y., belt conveyor and other machinery; Ohio Sand Co., Conneaut, Ohio, elevating and conveying machinery; Crown Dryer Co., Cleveland, Ohio, elevating and conveying machinery; I. E. Boomer, Detroit, Mich., one Triumph gravel excavator and digger; Lowe Bros., Dayton, Ohio, four special paint machines with motor drives; Mogollon Gold & Copper Co., Cooney, N. M., special grading machinery, and James W. Ellsworth & Co., Cleveland, Ohio, coal-elevating and conveying machinery.

Some Ball-Engine Orders.

Among recent orders of the Ball Engine Co., Erie, Pa., are the following: For the People's Ice, Light & Storage Co., McKeesport, Pa., two 100-horse-power horizontal cross-compound Corliss engines; Imperial Tobacco Co., Richmond, Va., 135-horse-power engine, direct connected to generator; Collins Hotel Co., Cleveland, Ohio, 60 horse-power and 30 horse-power, direct connected to generator; Central Paper Co., Muskegon, Mich., 50-horse-power variable-speed engine; Michigan Central Railroad shops, Jackson, Mich., 350-horse-power tandem compound engine, direct connected to alternator; Franklin Engraving & Electro Co., Chicago, Ill., 100-horse-power engine, direct connected to generator; Driskill Hotel, Dallas, Texas, 75-horse-power engine, direct connected to generator; Parma (Idaho) Creamery Co., 50-horse-power engine, direct connected to generator; Washenaw Light & Power Co., Geddes, Mich., 45-horse-power engine; Franklin (Ky.) Electric Co., 65-horse-power engine; Union Trust Co., Baltimore, Md., 80-horse-power direct-connected engines; George B. Peck Dry Goods Co., Kansas City, 250-horse-power engine, direct connected to generator; Cooper, Wells & Co., St. Joseph, Mich., 320-horse-power engine, direct connected to generator; Erwin Cotton Mills, Duke, N. C., 80-horse-power engine; Imperial Tobacco Co., Danville, Va., 135-horse-power engine; Water and Light Department, city of Evansville, Ind., 160-horse-power engine; E. J. Dupont & Co., Carney's Point, N. J., 100-horse-power

engine; Josephinum College, Columbus, Ohio, 100-horse-power engine, direct connected to generator; W. F. & John Barnes Co., Rockford, Ill., 135-horse-power engine, direct connected to generator; Franklin Electric Co., Conemaugh, Pa., 80-horse-power engine, direct connected; Henderson (N. C.) Light & Power Co., 125-horse-power engine; Batterson & Eisele, Edgewater, N. J., 135-horse-power engine, direct connected to generator; Detroit (Mich.) Sulphite Fiber Co., 350-horse-power engine, and Cleveland & Sandusky Brewing Co., Lorain, Ohio, 60-horse-power engine, direct connected to generator.

TRADE LITERATURE.

Graphite.

With the opening of another month comes the regular issue of that interesting periodical, "Graphite." For October "Graphite" contains some timely data and illustrations. It tells about the different forms of graphite and their respective uses. It is issued by the Joseph Dixon Crucible Co., Jersey City, N. J.

"Imperial" Pneumatic Tools.

Circular No. 14 of the Rand Drill Co. is a brief descriptive and illustrative publication regarding the "Imperial" pneumatic tools made by that company. Hammers, drills, wood-borers, compressors and other machines are shown. Inquirers on this class of equipment are invited to write the Rand Drill Co.'s nearest office. New York office at 128 Broadway; St. Louis, at Lincoln Trust Building; Philadelphia, in Stephen Girard Building; Pittsburg, in Farmers' Bank Building.

Special Machinery.

There has been issued a booklet in which illustrations and brief descriptions of special machines are brought together in condensed form with a view of interviewing manufacturers of duplicate parts who may possibly be following ordinary general tool methods. The designs shown are all successfully working today. The booklet is issued by the Garvin Machine Co., which has been largely interested in special machinery manufacture for many years past, and believes that the tools shown will interest. For copy of booklet address the Garvin Machine Co., Spring and Varlek streets, New York.

Pressure and the Life of Lamps.

With the title "Heart to Heart Talk on Regulation" there has been issued a pamphlet that is rather unique in its text. The publication will be of interest to all who want to be posted about pressure and its relation to the life of lamps. The lamp is the business end of an electric-lighting system. The customer pays for light, and the lower the electric plant can get the cost per useful candle hour the better for the credit side of the ledger. If further particulars are wanted from an engineering standpoint they can be obtained by writing the Bryan-Marsh Company, 136 Liberty street, New York.

Interesting to Railway Companies.

The Prouty-Pierce Locomotive Manufacturing Co., 695 Adams street, Kansas City, Kan., manufactures gasoline motors and locomotives exclusively. It builds only what has been perfected. The equipments are made to handle the passenger traffic on suburban and interurban roads, and are economical, reliable and safe. They can be run at any speed to meet the requirements of the service. They eliminate the cost of power-houses, poles, wires and bonding; they also eliminate the engineers, electrical experts and repairers. An illustrated pamphlet has been issued presenting full details regarding the Prouty-Pierce products.

Information for Founders.

Seekers after foundry information find the pages of the Obermayer Bulletin most interesting to them. This little monthly is issued for the express purpose of keeping molders fully informed and up to date on subjects connected with the conduct of their plants. Its October number is now current and contains articles on brass melting, liquid compound which can be diluted with water, partamol, a new compound for parting purposes, new charcoal, etc. The S. Obermayer Company of Cincinnati, Chicago, Pittsburg and other cities issues the Bulletin. Write the Pittsburg office for a copy. "Everything You Need in Your Foundry" is the watchword of the Obermayer Company.

Dean Bros.' Condensing Machinery.

The well-known Dean Bros.' condensing machinery is tersely, yet completely, described and illustrated in a pamphlet now being issued. This publication not only presents facts regarding the Dean equipment, but also some data of interest connected with the use of condensing machinery. The air-pump and condenser, horizontal vacuum

INDUSTRIAL NEWS OF INTEREST

Railway and Timber Investments.

Investors looking for an opportunity in railway or timber properties are invited to address Frank K. Warning, Harrison, Ark. Mr. Warning offers cedar, white oak, hickory and pine timber, short line industrial railway, lead and zinc properties.

International Steam Pump Co.

Correspondents of the department of publicity of the International Steam Pump Co., 114 Liberty street, New York, are asked to note that the department has removed from the New York office to the new Worthington Hydraulic Works, Harrison, N. J.

Ice Plant for Sale.

The South is an inviting field for the profitable operation of ice plants, and there are already hundreds there. One of these plants the owners offer for sale at a reasonable figure. It is making 10 tons a day and the city's population of 6000 is growing rapidly. For information address Capital, care the Manufacturers' Record.

Southern Investments Offered.

Southern investment securities are being sought by investors and bankers in all parts of the United States. Such propositions as electric railways, bonds and franchises, industrial plants of various kinds, mineral and timber lands, water-powers, etc., are commanding a good market. A specialty of such investments is made by the B. B. Collier Company, No. 7 Noel Block, Nashville, Tenn.

About Madeira, Hill & Co.

Messrs. Madeira, Hill & Co. announce that Henry Hudson Smith has resigned his official position in the firm and its affiliated organizations, namely, Madeira-Hill Coal Mining Co., Brookwood Coal Co. and Raven Run Coal Co. All correspondence with any of the corporations should be addressed in the corporate name of the particular company for which it is intended. The offices remain in the North American Building, Philadelphia.

Double-Band Mill for Sale.

Because of timber exhaustion and death of owner, a large double-band saw mill is now offered for sale. The property is located in Wisconsin, and includes complete plant (electric-lighting equipment also) for general lumber milling. It cost originally about \$125,000. This mill is offered at a low price for removal to other timber fields. Further particulars can be obtained by addressing G. W. Jones, treasurer of Lawrence University, Appleton, Wis.

Money Ready for Investment.

The establishment of manufacturing and other enterprises in the South and the enlargement of existing enterprises requires large amounts of money in the aggregate. Funds to be invested in this way are frequently sought by manufacturers and others. These latter may find it productive of results to write Henry J. Dexter, counsellor-at-law, 52 Broadway, New York. Mr. Dexter announces that he is prepared to invest both foreign and domestic capital in developed properties and established industries.

Herman Nieter's New Connection.

Herman Nieter, formerly of the Engineering Company of America, has been appointed sales agent of the Hammond Iron Works of Warren, Pa., with office at 180 Broadway, New York city. The Hammond Iron Works makes a specialty of building steel storage tanks, large and small, for oil, molasses,

acids and other liquids; also submit estimates on the construction of steel stacks, standpipes, tanks and other platework. Buyers of the kind of metal work referred to will find it will serve their best interests to write Mr. Nieter for estimates on anything they may be in need of.

Modernizing Their Plants.

Messrs. Dodge & Day, engineers, Philadelphia, Pa., have placed the orders for generators and motors for Alexander Bros., Philadelphia, with the Western Electric Co.; for the shafting, hangers, etc., with George V. Cresson Co., and wiring with Buchanan Company, all of Philadelphia. This firm of engineers has been commissioned to install a heating system in the building lately acquired by Alexander Bros. at 412 North 2d street, Philadelphia, and has also taken charge of the installation of additional motors at the plant of Schaum & Uhlfinger, 2d street and Glenwood avenue, Philadelphia.

The Piper Building Completed.

It is of interest to call attention to the Piper Building, southeast corner Baltimore and Hanover streets, the first large office building completed in the fire district of Baltimore. It was erected by Frank R. Gilbreth of Boston and Baltimore, who has made a reputation for rapid construction work. The Piper Building is five stories high, 36x80 feet, and cost about \$50,000. It contains three stories on the ground floor, and the four upper floors comprise 31 offices. The electric passenger and freight elevators are enclosed in a fireproof shaft. Messrs. Lord & Hewlett of New York were the architects.

Engineer for Important Vault Work.

In rebuilding the burned district of Baltimore the financial institutions are providing their new buildings with the very latest and best work in the vault line. The fire and burglar-proof vaults of the Hopkins Place Savings Bank will be especially interesting and most complete. Their construction will be superintended by George L. Damon, engineer and superintendent of construction of the Damon Safe & Vault Engineering Co., 53 State street, Boston, Mass. Mr. Damon's long experience in this class of work and the success he has met with in his specialty augurs well for the Hopkins Place Savings Bank vault equipment.

Thirty Variable-Speed Motors.

Thirty variable-speed motors operating on the Northern two-wire field control system have recently been shipped by the Northern Electrical Manufacturing Co. of Madison, Wis., to the New York Edison Co. These motors will be directly coupled to blowers for cooling the transformers in the various substations of the company. The Northern Company also recently shipped nine small motors to be installed in the substations of the Brooklyn Rapid Transit Co. This makes a total of 75 Northern motors now in use by the two companies, aggregating 1500 horse-power. A 60-kilowatt Northern balancing set has been shipped to the Edison Company for the equipment of its Waterside station.

Important Elevator Contracts.

The buildings being erected in Baltimore's burned district are being fully equipped with the latest devices for elevating both passengers and freight. Prominent among those securing the elevator contracts is the Maryland Elevator & Machine Co., 18 West street,

pump, combined air and circulating pump, vertical vacuum pump, jet and surface condensers, cooling towers, etc., are included in the machines mentioned. Copies of this pamphlet can be obtained by addressing the Dean Bros.' Steam Pump Works, Indianapolis, Ind., manufacturer of the Dean Bros.' designs in air pumps, etc., as noted.

Spatters—It Concerns Paints.

There is doubtless no better business builder for the retail paint dealer than the pleased customer. The latter must be obtained by furnishing him only the best goods for the least money commensurate with good quality. In commenting on this at some length and explaining what paints give the best of satisfaction a pamphlet entitled "Spatters" gives some important pointers to the paint dealer. This publication is issued by the Acme White Lead and Color Works of Detroit, Mich., manufacturer of paints. In the October number especial care is taken to show what are the best sellers for the autumnal trade. Paint dealers can find many good pointers in "Spatters."

"Apollo Best Bloom" Weight Cards.

Galvanized sheet-metal workers should note the offer of the American Sheet & Tinplate Co. Some time ago a quantity of "Apollo Best Bloom" Weight Cards were found at one of its plants. These were printed for the American Sheet Steel Co. before it and the American Tinplate Co. were merged, and therefore bear the former's name. This does not affect their value, and as they give the size, gauge, weight per sheet, number of sheets per bundle and square feet of surface in each sized sheet, they will not only be found valuable to every person who estimates upon cornice and other sheet-metal work, but will save them a great deal of time, worry and work. Rather than have this valuable information wasted, the company offers to send one of these cards, which are 19½x14 inches in size, printed in two colors upon tough cardboard and ready for hanging in the most convenient place, to all metal workers who will send their names to W. C. Cronmeyer, advertising agent, 222 Frick Building, Pittsburg, Pa.

The Branch Steam Trap.

The National Equipment Co., St. Louis, Mo., offers the Branch Steam Trap. The mechanism and construction of the trap is exceedingly simple. The working parts consist of a multiplying system of double levers operated by means of a copper float, which is free to slide vertically on the brass valve-rod. The water collects in the body of the trap until the float exerts a pressure on the under side of the lower lever. This pressure is multiplied six times and transmitted through the levers, which then raise the valve below off its phosphor-bronze seat and allows the contents to be discharged. The outrushing water holds the valve open until the weight of the float coming down on same closes it. The discharge valve is at all times water-sealed, and allows no steam to escape. The valve-seat, as well as the levers, is easily removed, should it be desired. The Branch is a return trap, and will deliver water against any pressure less than the pressure in the trap. It is furnished with a water gauge, blow-off gate valve, air-cock, and tapped for proper size pipe connections. The National Boiler Compound is also made by the company. Send for descriptive leaflets.

The Automatic Threading Lathe.

There is no operation in the machine shop requiring more care and consuming more time in proportion to its simplicity than the cutting of screw and worm threads. This fact has brought about the introduction of various improved machine tools for cutting screw and worm threads. The Automatic Threading Lathe enables its operator to arrive at the greatest possible speed, because the necessary movements are performed automatically, and the workman can thus attend to several lathes or other machines at the same time. The Automatic Machine Co. of Bridgeport, Conn., manufactures the Automatic Threading Lathe for threading worms, nuts and screws. Its machines are used in the most exacting shops not only in the United States, but also in various foreign countries, as is indicated in the fact that the company is represented in Berlin, St. Petersburg, Vienna, Paris, Barcelona and other great cities of the world. The Automatic Threading Lathe is described and illustrated in the company's pamphlet. Punch presses, automatic wire-forming machinery, special and original automatic machines and other equipments are also made by the Automatic Machine Co.

The Intramural Power Plant.

One of the interesting features at St. Louis is the plant of electric generators providing

power for the cars which form the main artery of movement within the exposition grounds. The plant is deservedly of interest to mechanical men, comprising, as it does, a variety of prime movers, seven in all, six steam-driven units with different makes of engines and one a water-wheel-driven generator. The location, blocks 42 and 45, Machinery Hall, is easy of access. The generators and engines are all for sale, delivery to be made after January 1. The machines have been in service but a short time. Their life has hardly been affected; in fact, the work they have been doing has rather been a means of getting them into good running shape. The guarantees given with new machines apply to these units in every respect, and they are recommended to the consideration of users of power apparatus of this character. Correspondence addressed either to the engine builder, Buckeye Engine Co., Salem, Ohio, or the Crocker-Wheeler Company, builder of the electrical apparatus, Ampere, N. J., will have careful and prompt attention. A pamphlet has been issued, devoted to a technical description of the engines and generators, accompanied by photographs of the various units. Send for a copy.

Refined Wood—A Lumber Substitute.

Refined wood is a product of wood or other fibers manufactured by an entirely new process, being a substitute for lumber without the defects of natural woods, but with many advantages which the natural woods do not possess. The materials used in the manufacture of refined wood are reduced to a pulp and then put through the processes which turn it out finished in boards of all lengths and widths required. The standard size machines make boards 63 inches wide, 16 to 20 feet long, and any thickness up to three inches. It is stated that refined wood is adapted for all kinds of construction work where wood is generally used, as well as in many other instances where other materials are consumed. For building railway cars, electric cars, theaters, ships, buildings, for manufacturing furniture, boxes, barrels, and a multitude of other things, refined wood is especially recommended because of its fire-proof qualities, its durability, its strength, lightness and various other meritable features. The machinery used in manufacturing refined wood is patented in the United States and foreign countries, and is being marketed in this country by the Refined Wood Co., of 29 Broad street, New York. The company makes the machines for producing refined wood, including the hydraulic presses for pressing refined woods to the density of the hardest natural woods. This press will press doors, moldings, picture frames, etc. Samples of refined wood and the machinery in operation can be seen at the company's offices. Those who are interested in this subject and desire further particulars are invited to write the company. An illustrated leaflet of brief details has been issued.

The Lidgerwood Cableway.

One of the most complete and interesting trade publications of its kind issued recently is the large illustrated book presenting full particulars regarding the Lidgerwood Cableway. This renowned hoisting and conveying device is employed in the construction of canals, dry-docks, dams, locks, filter beds, piers, fortifications; also in quarrying, mining, log handling, open pit mining, discharging vessels, coaling at sea and logging by steam, etc. It has been contracted for and installed in many of the most important and extensive industrial plants in the United States, by municipalities and the leading contractors for use in various kinds of contract work requiring the handling of materials in the most economical and expeditious manner. The various types of the Lidgerwood Cableway can be adapted to almost any kind of plant or work where hoisting and conveying is needed. In deep-sea coaling the Lidgerwood has earned an international reputation. In the book entitled "Lidgerwood Cableways" are presented several hundred photographic views of the apparatus in use for coaling at sea, in canal work, in power-house construction, at the League Island dry-docks, for lock and dam building, in mining operations, in water works construction, bridge construction, quarrying, railroad work, logging camps, etc. The views include all sections of the world, North and South America, Great Britain, South Africa and elsewhere. Such important engineering accomplishments as the New York subway tunnel, the St. Lawrence Power Co.'s canal, the Wachusett dam, etc., are shown. The Lidgerwood Manufacturing Co., 36 Liberty street, New York, will supply copies of the new book to those engineers and others who are likely to be interested at any time in purchasing hoisting and conveying devices of the most modern invention and manufacture.

SYNOPSIS OF THE

ANNUAL REPORT OF THE GULF & SHIP ISLAND RAILROAD

For the Year Ended June 30, 1904.

The annual report of the Gulf & Ship Island Railroad for the year ended June 30, 1904, shows an increase of 7 per cent. in gross earnings, with net earnings about stationary. The gain in gross receipts was due mainly to the fact that the lumber mills on the line had an outlet to foreign markets through Gulfport harbor, and to the material increase in passenger earnings. It is expected that the demand for lumber, both for interior consumption and for export, will now be decidedly stronger and prices higher. The cotton crop promises to be as good as last year or better, and, by reason of the opening of the Silver Creek branch, the company should handle fully 25 per cent. more cotton in the coming year than in the past.

The gross earnings, operating expenses and taxes, fixed charges, etc., of the year, compared with the previous year, were as follows:

	1904.	1903.	Increase.
Average miles operated.....	261	251	10
Gross earnings.....	\$1,829,815	\$1,705,047	\$124,768
Operating expenses and taxes.....	1,229,235	1,079,618	149,617
Net earnings.....	\$600,580	\$625,429	*\$24,849
Other income.....	11,801	3,719	8,082
Total net income.....	\$612,381	\$629,148	*\$16,767
Interest and other deductions.....	279,068	195,439	83,628
Balance applicable to dividends.....	\$333,313	\$433,718	*\$100,405
Dividends.....	200,000	100,000	100,000
Surplus.....	\$133,313	\$333,718	*\$200,405

*Decrease.

Gross earnings per mile of road averaged \$7011 in 1904, as compared with \$6793 in 1903.

The company's funded debt amounts to \$4,849,734, or \$18,581 per mile of road. On this sum the annual interest charge is \$242,487, or the equivalent of 42 per cent. of the total income of the fiscal year available for interest. The annual interest charge per mile of road amounts to \$929, as against total available income for the year of \$2301.

At Gulfport, Miss., the southern terminus of the road, 198 vessels loaded in 1904, as against 56 vessels in 1903, the total including 80 steamships, as compared with 20 the year before. The business that can be brought to Gulfport is limited only by the facilities afforded. The company is now building about 300 feet of additional wharf and filling in that portion of the pier which was formerly a slip. Upon this it will build a warehouse for the handling of merchandise imports and exports. The lumber shipments from Gulfport are greater than those from any other place on the Gulf of Mexico save Pensacola.

During the year the company delivered to its connections and to the Gulfport pier 38,245 loaded cars, as against 33,889 loaded cars in 1903, the increase being 4356 cars, or 12.86 per cent. The number of loaded cars received from its connections during the fiscal year was 18,859, as compared with 15,256 in the previous year, an increase of 3603 cars, or 23.62 per cent.

The new branch line running south from Mendenhall will be completed within the next 12 months. This will make a loop of about 100 miles from Mendenhall to Maxie. The connection will cheapen materially the operation of the Columbia and Mendenhall branches, and will greatly increase revenues.

The funded debt was increased from \$4,607,000 to \$4,835,000 by the issue of First Refunding and Terminal 5 Per Cent. Mortgage Bonds, to cover additions and betterments made in 1903 and 1904, amounting to \$228,000.

In order to secure funds for extensions and improvements not provided for by the bond issue the capital stock was increased by 5000 shares, and the proceeds of the new stock, amounting to \$500,000, were used in paying off the company's floating obligations.

The train and transportation statistics show still further noteworthy progress in the handling of freight with efficiency and economy. Although the number of revenue tons of freight carried one mile increased from 70,880,918 to 80,758,993 ton miles, or 13.93 per cent., the mileage of revenue freight trains decreased from 342,224 miles to 332,713 miles, or 2.78 per cent. The average freight-train load increased from 297 tons to 242 tons, and the average loaded carload increased from 15.91 tons to 16.97 tons.

FINANCIAL NEWS

The Manufacturers' Record invites information about Southern financial matters. Items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office Manufacturers' Record,
Baltimore, Md., October 12.

The Baltimore stock market was generally steady during the past week, with a good amount of business. In United Railways securities and Atlantic Coast Line stock there was some decline from the prices of the preceding period, but otherwise the dealings were without particular feature. At the close there were some advances. Investment bonds continued in good demand at firm figures.

In the trading United Railways stock sold between 7½ and 8; the incomes from 46¼ down to 45½, and the 4s from 90¼ to 90, reacting to 90½; United Light & Power 4½s, between 95 and 96; Consolidated Gas stock from 80¼ to 81½; the 6s from 111¼ to 111½, and the 5s at 115½ and 116; Seaboard common from 15¼ to 16½; the preferred from 32½ to 33¼; the 4s from 80¼ to 80½; the 5s from 103½ to 103¾, and the three-year 5s from 96¼ to 96; Cotton Duck common from 4 to 5¼; the incomes from 17¼ to 18; the 5s from 67¼ to 67, and United States Cotton Duck common at 5; G. B. S. Brewing common from 7¼ to 6¼; the incomes from 27½ to 26½; the 1sts from 55 to 53, reacting to 54.

Bank stocks sold as follows: Farmers and Merchants', 58; Merchants', 169; Marine, 37. Trust and fidelity company stock sold: Colonial Trust, 30; Fidelity & Deposit, 140; Union Trust, 45 and 46; United States Fidelity & Guaranty, 100; International Trust, 98¼ to 99; Mercantile Trust, 140 to 143½; Maryland Casualty, 49½ to 50½.

Other securities traded in were as follows: Atlantic Coast Line common, 137½ to 134½, reacting to 135; do. consolidated 4s, 98¾ to 98½; do. Connecticut 4s, 94½ and 95; do. do. 5s, 120 and 119; do. Connecticut stock, 287½; Northern Central Railway stock, 94¼ to 95¼; Georgia Southern & Florida common, 30; do. first preferred, 97½; do. second preferred, 64; do. 5s, 115; Maryland 3½s, 101; North Carolina 4s, 103; Carolina Central 4s, 96¼ to 97; Norfolk Railway & Light stock, 10 to 12; do. 5s, 86 to 88½; Newport News & Old Point 5s, 97½ to 98; Baltimore City 3½s, 1930, 111 to 112; do. 5s, 1916, 117½; Georgia & Alabama consolidated 5s, 110 to 109¼; Florida Southern 4s, 95¼; Western Maryland 4s, 84½; Alabama Consolidated Coal & Iron common, 14½ to 15; do. 5s, 74; Virginia Midland 4th, 110; Anacostia & Potomac 5s, 102 to 104; Coal & Iron Railway 5s, 105¼; Northern Central 4½s, 110½; Consolidation Coal, 67; Maryland & Pennsylvania 4s, 90½; Baltimore City Passenger 5s, 108¾; Charleston & West. Carolina 5s, 112; Chattanooga Electric 5s, 95; Atlanta Street Railway 5s, 106¼; Wilmington & Weldon 5s, 119¼; Maryland Telephone 5s, 90; City & Suburban 5s (Washington), 103½; South Carolina 4½s, 112; Georgia, Carolina & Northern 5s, 111.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended
October 12, 1904.

Railroad Stocks.	Par.	Bid.	Asked.
Atlanta & Charlotte.....	100	155	
Georgia Southern & Florida.....	100	25	40
Georgia Sou. & Fla. 1st Pref.....	100	97	
Georgia Sou. & Fla. 2d Pref.....	100	70	
United Railways & Elec. Co.....	50	7¼	8
Seaboard Railway Common.....	100	16	16½
Seaboard Railway Preferred.....	100	33½	34
Charleston & West. Carolina.....	100	50	52½
Norfolk Railway & Light.....	25	10	11
Atlantic Coast Line.....	100	134¼	134½
Atlantic Coast Line of Conn.....	100	280	310

Bank Stocks.

Citizens' National Bank.....	10	27½	29
Commercial & Far. Nat. Bank.....	100	100	
Drovers & Mech. Nat. Bank.....	100	325	
Farmers & Mer. Nat. Bank.....	40		60
First National Bank.....	100	135	
German Bank.....	100	105	
Merchants' National Bank.....	100	169	171
National Bank of Baltimore.....	100	119	122
National Howard Bank.....	10	10¼	12
National Marine Bank.....	30	37	
National Union Bank of Md.....	100	117¼	120
Western National Bank.....	20	40	

Trust, Fidelity and Casualty Stocks.

Central Real Estate & Trust.....	50	49	60
Colonial Trust.....	50	30	32
Fidelity & Deposit.....	100	139¼	140
International Trust.....	100	98	100
Maryland Casualty.....	25		51½
Mercantile Trust & Deposit.....	50	142½	143
Union Trust.....	50	42½	46½
U. S. Fidelity & Guaranty.....	100	100	101½
Security Trust.....	100	105	

Miscellaneous Stocks.

G. B. & S. Brewing Co.....	100		7¼
United Elec. L. & P. Pref.....	50		39
Cotton Duck Voting Trust.....	100	4%	5¼
Consolidation Coal.....	100	67	70
Consolidated Gas.....	100	81	82

Railroad Bonds.

Albany & North.....	93		
Atlanta & Charlotte 1st 7s, 1907.....	107	110	
Atlantic Coast Line Con. 4s.....	98¾	98½	
Carolina Central 4s.....	96	96½	
Char. Col. & Aug. 1st 5s, 1910.....	116		
Char. Col. & Aug. 2d 7s, 1910.....	112		
Coal & Iron Railway 5s.....	105¼		
Florida Southern 4s.....	94½	95½	
Georgia, Car. & North. 1st 5s, 1929.....	110½	111	
Georgia South. & Fla. 1st 5s, 1945.....	112		
Georgia Pacific 1st 5s, 1922.....	112		
Petersburg, Class A 5s, 1926.....	112		
Petersburg, Class B 5s, 1926.....	120		
Piedmont & Cum. 1st 5s, 1911.....	105¼		
Raleigh & Augusta 1st 6s, 1926.....	122	125	
Seaboard & Roanoke 5s, 1926.....	111		
Southern Railway Con. 5s, 1994.....	116½		
Virginia Midland 5th 5s, 1926.....	112		
West. North Carolina Con. 6s, 1914.....	112		
Wilmington, Col. & Aug. 6s, 1910.....	110		
Wilmington & Wel. Gold 5s, 1935.....	118¼	119¼	
Charleston City Railway 5s, 1923.....	105		
Charleston Con. Electric 5s, 1999.....	85	88	
Knoxville Traction 1st 5s, 1928.....	105		
Newport News & Old Pt. 5s, 1938.....	99		
Norfolk Street Railway 5s, 1944.....	107		
United Railways 1st 4s, 1919.....	90¾		
United Railways Inc. 4s, 1949.....	80	80½	
Seaboard 4s.....	95	95¼	
Seaboard 10-year 5s.....	104		
Seaboard 3-year 5s.....	96¾	96	
Lexington Railway 1st 5s.....	101	102½	
Norfolk Railway & Light 5s.....	88	89	
Georgia & Alabama Con. 5s.....	109	109¼	
South Round 5s.....	108¾	111¼	
Western Maryland 4s.....	87¼	84½	
Atlanta Con. St. Ry. 5s.....	106¾		

Miscellaneous Bonds.

Mt. V. & Woodb'y Cot. Duck 5s.....	66	67	
Mt. V. & Woodb'y Cot. Duck Inc. 18.....	18		
G. B. & S. Brewing 1st 3-4s.....	53¾	54	
G. B. & S. Brewing 2d Income.....	26	27	
United Elec. Light & Power 4½s.....	96		
Consolidated Gas 6s, 1910.....	111¼	111½	
Consolidated Gas 5s, 1939.....	115½	116	

SOUTHERN COTTON-MILL STOCKS

Quotations Furnished by Hugh Mac-
Rae & Co., Wilmington, N. C., for
Week Ending October 11.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	69	75
Aiken Mfg. Co. (S. C.).....	85	90
Anderson Cotton Mills (S. C.).....	121	
Arkwright Mills (S. C.).....	105	
Augusta Factory (Ga.).....	72	75
Belton Mills (S. C.).....	98½	101
Brandon Mills (S. C.).....	102	
Buffalo Cotton Mills (S. C.).....	93	92½
Buffalo Cotton Mills (S. C.) Pfd.....	93	96
Cabarrus Cotton Mills (N. C.).....	122½	
Chadwick Mfg. Co. (S. C.).....	102	
Chiquola Mfg. Co. (S. C.).....	95	
Clifton Mfg. Co. (S. C.).....	89	95
Clinton Cotton Mills (S. C.).....	135	
Courtenay Mfg. Co. (S. C.).....	109	111
Columbus Mfg. Co. (Ga.).....	90	
Dallas Mfg. Co. (Ala.).....	79	85
Darlington Mfg. Co. (S. C.).....	90	92
Eagle & Phenix Mills (Ga.).....	106	
Easley Cotton Mills (S. C.).....	102	
Enoree Mfg. Co. (S. C.).....	77	88
Enoree Mfg. Co. (S. C.) Pfd.....	100	
Enterprise Mfg. Co. (Ga.).....	80	
Exposition Cotton Mills (Ga.).....	160	200
Gaffney Mfg. Co. (S. C.).....	60	65
Gainesville Cotton Mills (Ga.).....	70	
Graniteville Mfg. Co. (S. C.).....	115	130
Greenwood Cotton Mills (S. C.).....	102	
Grendel Mills (S. C.).....	99¼	101
Henrietta Mills (S. C.).....	190	200
King Mfg. Co., John P. (Ga.).....	87½	90
Lancaster Cotton Mills (S. C.).....	100	110
Lancaster Cot. Mills (S. C.) Pfd.....	100	
Langley Mfg. Co. (S. C.).....	92	98
Laurens Cotton Mills (S. C.).....	171	
Limestone Mills (S. C.).....	85	95
Lockhart Mills (S. C.).....	85	98
Louise Mills (N. C.).....	103	
Louise Mills (N. C.) Pfd.....	95	
Mills Mfg. Co. (S. C.).....	100	
Mills Mfg. Co. (S. C.) Pfd.....	79	85
Monarch Cotton Mills (S. C.).....	98	102
Monaghan Mills (S. C.).....	120	
Newberry Cotton Mills (S. C.).....	105	
Norris Cotton Mills (S. C.).....	100	
Orangeburg Mfg. Co. (S. C.) Pfd.....	99¼	101
Orr Cotton Mills (S. C.).....	99	101
Pacolet Mfg. Co. (S. C.).....	99	101
Pacolet Mfg. Co. (S. C.) Pfd.....	99	101
Pelzer Mfg. Co. (S. C.).....	172	
Piedmont Mfg. Co. (S. C.).....	179	181
Poe Mfg. Co., F. W. (S. C.).....	129	135
Raleigh Cotton Mills (N. C.).....	105	
Roanoke Mills (N. C.).....	100	105
Saxon Mills (S. C.).....	60	65
Sibley Mills (S. C.).....	132	140
Spartan Mills (S. C.).....	145	
Tucapau Mills (S. C.).....	135	
Union Cotton Mills (S. C.).....	99	103
Union Cotton Mills (S. C.) Pfd.....	115	125
Victor Mfg. Co. (S. C.).....	99	101
Warren Mfg. Co. (S. C.).....	106	
Washington Mills (Va.) Pfd.....	96	
Whitney Mfg. Co. (S. C.).....	110	
Wilm'tn Cot. Mills (N. C.) Pfd.....	100	
Woodruff Cotton Mills (S. C.).....	97	100

New Corporations.

It is reported that a new bank will be organized at Buckeye, Ky.

The Merchants and Farmers' Bank of Pickens, Miss., has begun business with E. W. Burton as cashier and P. H. Murphy, assistant cashier.

The Home Fire Insurance Co. has been incorporated at Memphis, Tenn., by T. K. Bess, Flora Bess, R. G. Bess, W. B. Hopkins and W. A. Lake.

The Western Bank of Louisville, Ky., has been converted into the Western National Bank, with a capital of \$300,000. T. L. Jefferson is cashier.

T. B. Crowder has been elected president; W. B. Grimes, vice-president, and W. W. Vass, cashier, of the Wake County Savings Bank at Raleigh, N. C.

Walter M. and J. U. Jackson of North Augusta have applied for a charter for the Homeseekers' Investment Co. of Aiken county, South Carolina; capital \$25,000.

The Citizens' Life Insurance Co. is being organized at Louisville, Ky., with \$100,000 capital. C. B. Norton will be president; L. T. Davidson, vice-president.

The National Metropolitan Bank and the Citizens' National Bank of Washington, D. C., have been consolidated under the name of the Metropolitan National Bank.

The O. W. Carr Company has been chartered with \$10,000 capital at Raleigh, N. C., the incorporators being O. W. Carr, Mrs. Lula Carr, Lee H. Battle and James F. Cobb.

The First National Bank of Mercury, Texas, capital \$25,000, has been approved. The organizers are M. C. Cawyer, John B. Cawyer, Charles H. Cawyer and Will L. Johnson.

A new bank to be called the Cherokee National, with \$100,000 capital, will, it is reported, be established at Enid, O. T., by J. A. Hill of Enid, E. E. Hull of Kingfisher, O. T., and others.

The Commercial National Bank of Greenville, Texas, capital \$100,000, is being organized. J. O. Teagarden, formerly cashier of the First National Bank of Greenville, will be cashier.

The First National Bank of Carrizo Springs, Texas, capital \$25,000, has been approved. The organizers are J. L. McCaleb, J. W. Campbell, John E. Omeador, N. A. McCaleb, F. Vandervoort.

The Bank of La Grange is to begin business at La Grange, N. C., about November 1. The officers are W. E. Borden, president; Dr. J. W. P. Smithwick, vice-president; R. G. Creech, cashier.

The First National Bank of Whitney, Texas, has been approved, with capital of \$30,000. The organizers are A. G. McMahon, D. T. Bomar, E. K. McMahon, W. T. Herrick, M. Anglin and others.

The First National Bank of Headland, Ala., has been organized with \$25,000 capital. The officers are G. H. Malone of Dothan, president; A. J. Livingston, vice-president, and J. J. Espy, cashier.

The Bank of Isola, Washington county, Mississippi, capital \$10,000, has been approved. The directors are A. W. Oliver, B. A. Wright, J. A. Barnes, P. C. Chapman, M. B. Buslie and D. M. Quinn.

The Zion Savings Bank of Orangeburg, S. C., in which colored capital is interested, has been commissioned with \$10,000 capital. The organizers are A. D. Dantzler, W. N. Inabinet and Daniel Moore.

The First National Bank of Breckenridge, Texas, capital \$40,000, has been authorized to begin business; W. H. Eddleman, president; Claude McCauley and W. H. Green, vice-presidents; J. W. Ward, cashier.

The Farmers and Merchants' National Bank of Mart, Texas, capital \$50,000, has been approved. The organizers are Geo.

TABLE OF CONTENTS.

EDITORIAL:	Page.
The Cotton Situation.....	236
A Supreme Need of the South.....	236
Steel Furniture.....	236
The British Ironmasters' Visit.....	236
Gains on Southern Roads.....	236
Just a Slander.....	236
Negro Support of Negro Common Schools.....	236
Swinging Partners in Sociology.....	236
Growth on Healthy Lines.....	236
Warehousing Cotton.....	236
For Italian Immigration.....	236
To Build Automobiles.....	236
Education of Southern Textile Operatives.....	237
New York to California Without a Stop?.....	302
Anxious to Welcome Foreign Spinners.....	302
Benner, the Prophet.....	302
The Pig-Iron Market.....	303
To Encourage Investments.....	303
A \$100,000 Stove Foundry.....	303
For a First-Class Road.....	303
80-Ton Oil Mill Completed.....	303
Big Fertilizer Plant.....	303
Individual Exhibits at St. Louis (Illus.).....	303
RAILROADS:	
New Lines Proposed.....	304
Middleboro Mineral.....	304
"Cotton Belt" Report.....	304
Big Deal Announced.....	304
Line to Zinc Mines.....	304
Kansas, Okmulgee & Gulf.....	304
Day and Night Express Trains.....	306
Logging Road.....	306
Proposed Cut-Off.....	306
Railroad Notes.....	306
TEXTILES:	
A \$200,000 Finishing Plant.....	306
A \$500,000 Cotton Mill.....	306
A \$150,000 Damask Mill.....	306
The New Muscogee Mill.....	306
The Cotton Movement.....	306
Bookbinding Cloth Machinery Wanted.....	306
Textile Notes.....	306
Quotations of Cotton Yarns.....	306
Would Push American Wares.....	306
Big Texas Lumber Mill.....	306
MECHANICAL:	
Coltrin Cement Mixers and Molds (Illus.).....	306
New Air-Hose Coupler (Illus.).....	306
A New Boom Swinging Gear (Illus.).....	306
Steele & Sons' Brick Machinery (Illus.).....	307
The Diamond Expansion Shield (Illus.).....	307
New Steam Turbine Process.....	307
CONSTRUCTION DEPARTMENT:	
Baltimore Building Notes.....	308
New Enterprises.....	308
Building Notes.....	311
Railroad Construction.....	312
Machinery Wanted.....	313
Mexico.....	313
Industrial News of Interest.....	314
Trade Literature.....	314
FINANCIAL NEWS:	
Review of the Baltimore Market.....	316
Securities at Baltimore.....	316
Southern Cotton-Mill Stocks.....	316
New Corporations.....	316
New Securities.....	316
Financial Notes.....	316
D. Campbell, T. M. Blackwood, P. W. Wheelis, C. D. Whitely and Mrs. M. E. Howard.....	
The Citizens' Insurance Agency of Parkersburg, W. Va., has been organized, with \$10,000 capital. The incorporators are J. H. Knapp, W. W. Jackson, J. W. Roberts, Thomas Gartlan and R. J. A. Boreman.	
The High Street Permanent Building and Savings Association has been incorporated at Baltimore, Md., with \$300,000 capital, by Charles Birkenstock, Aaron J. Habelson, F. Henry Maisch, Charles F. Stein and Samuel Siegal.	
The Bank of Ripley has organized at Ripley, Miss., by electing officers as follows: S. S. Finger, president; Claude Hines, vice-president; directors, Claude Hines, Thomas Spight, Judge Himbrough, Ellis Finger and S. S. Finger.	
A new bank is reported organized at Albertville, Ala., with \$50,000 capital, and the following officers: Hogan Jackson of Goodwater, president; Dr. W. R. Sherman of Albertville, vice-president. Some of the principal stockholders are as follows: T. B. McNaron, Mrs. T. B. McNaron, W. W. Curry, J. P. and W. G. Emmett, W. C. Sims, W. W. Decker, T. R. Rise and Dr. W. A. Elrod.	

[For Additional Financial News, See
Pages 30 and 31.]

S.

Page.
295
295
295
295
295
295
296
296

296
296
296
296
296
296
297
302
302
302
303
303
303
303
303
303
303
303

304
304
304
304
304
304
305
305
305
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31

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